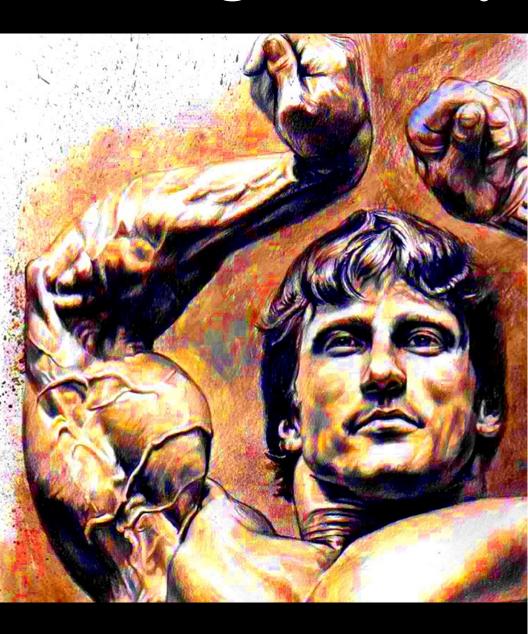
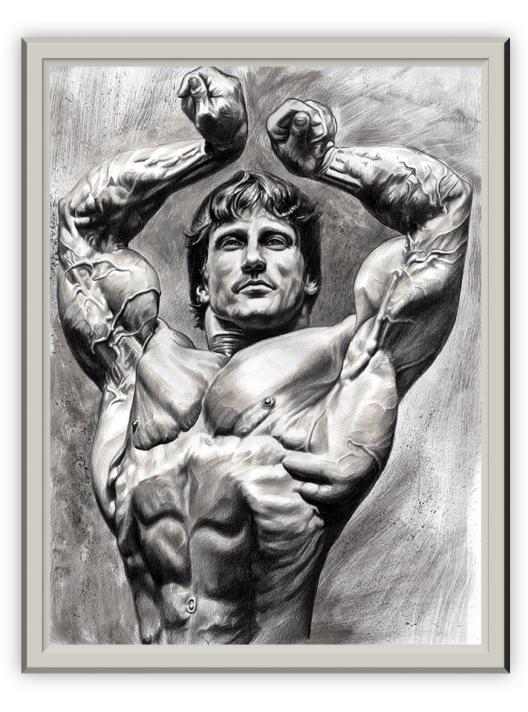
Building the Body



Frank Zane 2019



Front cover by Ron Dunn Back cover by John Balik

Frank Zane's Ruilding the Rody

Building the Body 2019 Annual

Frank Zane
PO Box 1964
La Mesa, Ca 91944
www.FrankZane.com
Zane0001@aol.com

p 4

IN THIS ISSUE

Zane Experiences

Zane Experiences	P	
Pace Yourself to Prog	ress	6
Zane Whey Bars & co	offee	7
Goal Setting	;	8
Exercise Medicine	10	
Stomach Vacuums	14	
Try Tri Setting	16	
Build Your Neck	18	
Accelerated Injury Healing 20		
Failure Not an Option	22	
4 Levels of Aging	24	
Best Ab Exercises	26	
Ab so lutely	28	
We Get Letters	30	
1983	32	
Treat Osteo-Arthritis	32	
Stretching	33	
Negative Body Metaphors 36		
Commonly Used Metaphors 37		
31 Day Wonder Posir	ig 3	88

The Mind Muscle Machines	40		
Best Way to Squat 4	12		
The Leg Blaster 44	ļ		
91 Day Peak Physique 4	5		
Try Peak Physique program 46-57			
Horseshoe Triceps	58		
Peaking the Biceps	60		
Gain Weight Proportionally	62		
Which Look do You Prefer?	64		
Choose Your Look	66		
Muscular Evolution	68		
A Contest Transformation	68		
Lucid Dream Healing	70		
Bodybuilding Psychology	78		
4 Forces of Psychology	79		
Bodybuilding as Character Armor 81			
Bodybuilding as Character Completion	83		
Frankly Speaking	84		
Wonder Body, Peak Physique 86			
Zane Bodybuilding Manual	87		



ZANE EXPERIENCES

You do not have to be in top shape to do a Zane Experience.

No matter what condition you are currently in consider doing a Zane Experience at your earliest conventience. Who isn't inter-

ested in saving years of trial and error experimentation trying to find out what kind of training program is best for you? I will personally help you with any of our Zane Experience programs. Just pick the one that best fits your time constraints and budget:

Telephone Con-

sultation—Email me a front, back, and side photo of you in a bathing suit and I will zero in on exactly what training and nutritional program is best for you at your current stage of development. Go to frankzane.com and select the half hour consultation for \$119 or for more details choose the hour phone call for \$199. I will get back to you with a phone number and

best time to call me and you'll be on your way to creating the body of your dreams.

Quick Physique Critique—

Come to my private training studio located near San Diego California and I will evaluate your development and give you a workout and diet that best fits your training needs. We can use the 90 minutes together to cover workout and diet

and/or detailed instruction in posing if you are a physique competitor. It is an hour and a half going over whatever you need most. Cost is \$350 or \$650 for two.

One Day Zane Experience — This program is designed for beginners or anyone who can only spare 3

hours to brush up on exercises and nutrition. It is designed to teach the full body workout and is perfect for man or woman wishing to get started with a solid weight training routine in their home or commercial gym or to get back in shape after a layoff. You will learn what it feels like to get a pump and how to integrate stretching into your

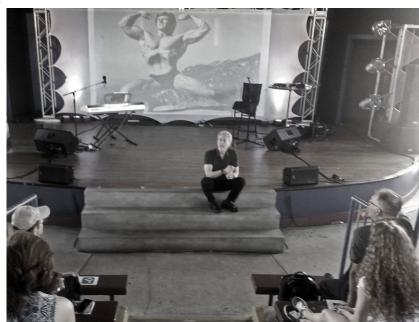


workout. Programs usually run 10AM to 1PM any day of the week and cost \$595 for one or \$1095 for two people.

Two Day Experience is designed for intermediate trainees and cosists of two 3 hour private session 10AM to 1 PM. First day covers upper body exercises and stretches and second day of the two way split routine details waistline and leg training. It begins with photographic analysis where I will take photos of you and do special effects to show you what you can look like in the near future. Learning what you look like to other people will help you visualize your new body. Bring your own flash drive and Frank will transfer your photos so you can use it as a visualization exercise to become aware of how othpeople see you. Cost is \$1190 for one or \$2280 for two.

Three Day Experience is the advanced program where the three way split routine is covered. After your photos are taken day one Frank critiques your form on pulling muscles day one, abs and legs day two, and pushing muscles day three. These three 3 hour session thoroughly cover workout organization, nutrition, and posing or how to become a personal trainer if you choose. You leave knowing exactly what to do and how to do it. Cost is \$1785 for one or \$3470 for two people coming together.

Remember no special development is necessary for your Zane Experience. So please come as you are!



er

Pace Yourself to Progress

3 factors are necessary for bodybuilding progress:

- 1.A training program with schedule
- 2. Knowledge of results
- 3. Plan for progression

Summarizing the routines described in Zane Bodybuilding Manual there is the full body workout done two or three times a week; the two way split

routine working upper body one day and lower body the next. It is best organized by training two days in a row and taking the third day off or simply working out 4 days a week

an oak. Shall he turn his spring into The final routine I've alsummer? ways relied on in my training for competition is the 3 way split routine and there are three versions: pulling muscles, legs, pushing muscles; torso, legs, arms; back of upper body, legs, front of upper body. Regardless of which variety you choose the organization is the same for a 4 day cycle of train, train, train, rest, or a 5 day cycle of train, rest, train, train, rest.

A wonderful way to familiarize yourself with all these routine is to complete the 91 Day Wonder Body program. Once complete, you can continue with the 3 way split you found most effective

Progressing through these routines in a seasonal manner insures training longevity.

Everyone tends to have an 'off season' where they are not able or motivated to train seriously. When this happens a good program to follow is the full body routine, just do one set of each exercise and move quickly through the routine. It won't take too long and just doing this twice a week with a decent diet will keep you in tolerable condition.

Next move up to the two way split routine, you can do upper body

Why should we be in such des-

perate haste to succeed and in such

desperate enterprises?

If a man does not keep pace with his

hears a different drummer.

Let him step to the music he

It is not important that he should

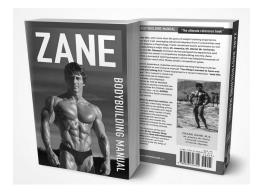
mature as soon as an apple tree or

one day, rest, then legs & abs, rest, repeat. I like this routine when I'm traveling.

Finally when ready (for me it's beginning of spring) step up to the 3 way split done in a 5 day cycle. This lasts until the beginning of summer when I begin the

companions perhaps it is because he hears however measured or far away

randomized 5-5-4 day routine right up until one month before my peaking date. At this point my goal is peaking and getting as muscular as possible so it's train three days in a row then rest the fourth day. I never train upper body two days in a row to minimize wear on shoulders



Zane Whey Protein Bars

These taste really good and are great to have as an amino acid chaser. Eating a small amount of carbohydrate right after ingesting amino acids (my morning mixture is glutamine, arginine, super sports AAs) acts as an absorption matrix for dissolving capsules and pills as well as an slight insulin boost necessary for optimum amino acid absorption. Here's the recipe:

First you need to layout these ingredients: Eggs, Splenda, dry milk, pumpkin, applesauce, banana, vanilla flavoring, cinnamon, Zane Whey Plus protein, ground flaxseed, quick oats, dried fruit mix, and walnuts. This recipe is modified slightly from the

one give in last months issue. Feel free to experiment by adding or substituting your favorite ingredients.

Preheat oven to 350 degrees. In a large bowl mix these ingredients with a whisk or hand mixer in the order listed:

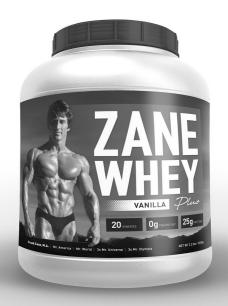
3 whole eggs, 1 cup Splenda, 1 & 1/4 cup dry milk, 8 ounces pump-kin (1/2 regular size can), 4 ounces applesauce, 1 small mashed banana, 1 tsp. vanilla, 1 tsp cinnamon, 3 scoops Zame Whey Plus vanilla or chocolate protein, 2/3 cup ground flaxseed, 2

cups quick oats, 1 cup dried cherries berries mix (or your favorite dried fruit mix), 1 & 1/2 cup raw walnuts chopped. Next spray a 12 by 14 inch baking sheet with Pam, spread mix on baking sheet, it should be not more than 1/2 inch thick. Bake at 350 degrees for 15 to 20 minutes. Cool, cut into bars, store in a dry container. My Favorite pre workout snack is a Zane Whey protein bar with a glass of

Zane Whey protein shake. I pour 8 ounces of unsweetened almond milk into a shaker, add one scoop of Zane Whey Plus protein, shake for a few seconds and slowly sip between bites of protein bar. It is so delicious, like

eating a tasty dessert, that It satisfies my hunger and puts me in a good mood for my workout not to mention the energy and great pump I get in my workout!

Coffee is better when I mix in a teaspoon of vanilla Zane Whey. Stirring it in with a spoon gives me a few exrra grams of protein in a drink where there was no protein before. And it tastes better too!



Progress

Always best to start new projects early to take your time and do a good job.

After all anything worth doing is worth doing well. What is needed is lots of practice. Improvement is more likely when you practice your craft according to a schedule. A schedule you find interesting and that you are eager to follow. A schedule means you have one less decision to make because your schedule has already

made the decision for you to participate. So you just go and do it.

Learning new skills

Learning is growth. And growth can be painful, it's called growing pains such as occurs in adolescence where rapid expansion of muscles creates an un-

accustomed sensation in the body. When you train hard and experience soreness the next day or the next day, this is growing pains. It's volitional suffering you choose to create this soreness and start associating 'pain' with being desirable, a precursor for growth. When you do this you come to regard pain as 'it hurts so good'.

Too much pain, of course is unpleasant, but if you can tolerate it and not get injured, and do all the right therapy treatments, progress will be rapid. Rapid only to the point where your body becomes accustomed to it and then change is necessary.

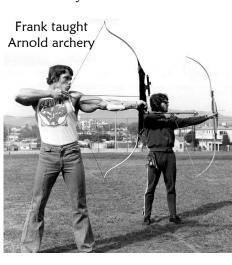
There are several ways to induce change into a routine that isn't working so well anymore. You can train lighter and with less rest between sets; stretch more and longer between sets; do even slower negatives, specialize on a weak lagging bodypart; train less frequently but heavier with lower reps in the 6 to 8 range; train three days in a row and then do three days in a row doing only stretching, ab work, and cardio; Take a 3 day layoff allowing for more healing; get a deep

tissue massage; take Epsom salt baths; sleep a half hour longer; take a 20 minute nap in the afternoon; Eat more slowly; Eliminate junk food; and much more.

When learning a new skill you need to practice it often, every day or at least every other

day. Take archery for example. I can get pretty good if I shoot a little 4 or 5 times a week, but when it's only once a week I may get a few bullseyes but my grouping is more random and not as tight. Consistency suffers because form is not up to par. I helped Arnold learn archery and when we shot together his first arrow was usually right in the center. His body knew how to do it, but when he started analyzing his shots the mind took over and his arrows began scattering all over the target.

When I work with people in



Zane Experience programs the emphasis is on good form in the exercises. It takes focus on correct range of motion, speed, and rhythm of repitions. By doing it right one can begin to feel a stimulating sensation in the targeted muscles. At the end of the set the pump starts to come on and muscles expand. Without resting a stretch for the working bodypart comes next held for 15 seconds while thinking 'I am flexible and can stretch my limits.'

Competitive Training

Training for competition is an arduous task and need right planning and preparation. I learned it's a good idea to not compete more than once a year in order to take ample to time to reach a physical peak. Best to allow 6 months to get in shape for a competition, i.e. the first three months get in good enough shape to en-

dure the intensive workouts of the the last three months where everything is stepped up. For me springtime meant gradually building up my poundages on exercises, resting long enough between sets to allow this to happen. Then by the beginning of Summer I didn't increase poundages but instead rested less between sets; I called it 'cultivating the breathless state' and it always led to more definition.

I've always been on a yearly seasonal cycle in my training. Spring is beginning serious training focusing on building strength,
Summer is creating more definition by

training faster; Autumn is peaking; winter is maintenance and specialization. So my plan for each year is to peak in the Autumn, it was during competitive years in Septemer or October, now it has been early December. In the words of Bill Pearl: "As you get older and train for peak condition you will wish you had more time." I've found this to be true and now I find myself specializing on weakpoints more and training hard for a peak less often.

31 Day Wonder Posing

The most important practice for anyone competing in a physique contest is posinf. Not only is this how a person competes but it also is a form of exercise, i.e. isometric exercise. Tensing the muscles and holding the tension develops and defines the muscles. Poses are positions you assume with your body in which photos

should be taken. It is important to see how you look to other people. Improvement starts with awareness. So in my Zane Experience programs I take photos of seminar participants then do special effects on them to show what they might look like in the near future. They use this as a visualization exercise, seeing before photos turn into afters. Action follows thought.

Ask about Frank's new 31 Day Wonder posing. Learn to pose in one month and get in shape doing it!

Exercise Medicine

This report is based on the Exercise is Medicine conference held in Denver, Colorado, in June 2017. It reveals new findings on the favorable effects of even moderate increases in physical activity.

Aging is associated with the replacement of muscle by fat. Waist circumference increases due to an increase in visceral fat, which causes chronic inflammation. Muscle loses quality and strength, contributing to the disabilities of old age. Aging is also associated with increased insulin resistance and diabetes.

Physical inactivity accounts for many of these problems, which can be greatly reduced by **exercise**. Exercise reduces blood glucose levels.

People who are fit have a lower risk of death—even if they smoke and have elevated cholesterol and blood pressure—compared to unfit people that have none of those risk factors.

Dr. Ross was chair of a 2016 American Heart Association Committee that issued a report showing that low cardiorespiratory fitness is a stronger predictor of death than smoking, high cholesterol, type II diabetes, or high blood pressure.

Endothelial dysfunction refers to the reduced capacity of blood vessel walls (the endothelium) to dilate and thereby increase blood flow. Endothelial dysfunction is one of the

early changes contributing to *atherosclerosis*, a narrowing of the arteries that increases the risk of heart attack and stroke.

A 1% increase in endothelial function is associated with a 13% reduced risk of cardiovascular disease. Exercise prevents the decline of endothelial function that occurs with age.

In one experiment, Dr. Padilla showed that only five days of reduced activity (from 10,000 steps per day to 5,000 steps per day) substantially reduced endothelial function in leg arteries. He also showed that engaging in

exercise prior to prolonged sitting could prevent the endothelial dysfunction normally caused by sitting. Even fidgeting the legs for one minute out of every five can prevent the endothelial dysfunction caused by sitting. Finally, Dr. Padilla has also demonstrated that the endothelial dysfunction of leg arteries resulting from six hours of continuous sitting could

be *reversed* by a 10-minute walk.

Brian Irving, Ph.D. (assistant professor, Louisiana State University) has an interest in the benefits of different types of exercise for the elderly. For example, resistance training, but not endurance training, has been shown to increase muscle size and mitochondrial density in the elderly. Endurance training does, however, prevent mitochondria from becoming



dysfunctional. Dr. Irving's team has shown that a **combination** of endurance and resistance exercise is the best way to improve cardiorespiratory fitness, muscle strength, and mitochondrial capacity. The team also demonstrated that the increase in **insulin resistance** that happens with aging is due to *increasing fat* rather than simply being an inevitable consequence of aging. Endurance exercise has been shown to increase insulin sensitivity.

Jonathan Myers, Ph.D. (health research scientist, Veteran Affairs Health Care System, Palo Alto,

California) has established that exercise capacity is a better predictor of the risk of death than smoking, diabetes, high blood pressure, or other exercise test results. Exercise capacity is the maximmum metabolic equivalent (MET) measured on exercise equipment. MET is the ratio of

energy expended during an activity compared to the energy expended when a person is passive (such as watching television). Leisurely walking uses just over **2 METs** of energy, whereas jogging uses about **7 METs**. Dr. Myers has also established that cardiorespiratory fitness (peak oxygen uptake during maximum exercise) is the best way to determine the exercise intolerance seen in heart failure patients. Exercise testing requires equipment and trained staff that are often

not available in medical facilities. So Dr. Myers has been evaluating questionnaires that estimate exercise capacity in order to attempt to predict mortality. The single question, "How do you rate your cardiorespiratory fitness compared to your peers?" has proven to be very effective. Those who rated themselves lower than their peers have a 91% greater chance of dying of cardiovascular disease compared to those who rate themselves higher than their peers. Martin Gibala, Ph.D. (professor, McMaster University, Ontario, Canada) studies

the effects of highintensity interval training (HIIT). HIIT exercise involves alternating between a brief period of "all-out" effort for several seconds, and a period of resting recovery time. Martin Gibala, Ph.D. (professor, McMaster University, Ontario, Canada) studies the effects of high-intensity interval training (HIIT). HIIT exercise involves alternating between a brief period of

"all-out" effort for several seconds, and a period of resting recovery time. The study showed that improvement in insulin sensitivity, cardiorespiratory fitness, and muscle mitochondrial content was the **same** for both groups, despite the fact that the moderate intensity cycling group spent **five times** more total time exercising than the HIIT group. A review of the literature showed that when overweight/ obese people practiced HIIT for more than 12 weeks, they experienced a

reduction in body fat, waist circumference, and blood pressure, and an increase in cardiorespiratory fitness. Dr. Gibala has established that HIIT can be achieved by stair-climbing as effectively as on an exercise bike.

Barry Franklin, Ph.D. (professor, Wayne State University, Detroit, Michigan) is concerned with whether excessive exercise can be harmful. Exercise reduces cardiovascular disease by improving the function of the heart and blood vessels. But excessive and vigorous exertion in those who have a

poor cardiorespiratory condition and who are at increased risk of heart disease due to coronary artery disease or structural defects of the heart, has been shown to markedly increase the risk of sudden cardiac death

and heart attack. Snow-shoveling is one confirmed cause of this, but any bout of excessive exercise in unfit, atrisk individuals can have this result

Steven Malin, Ph.D. (assistant professor, University of Virginia) studies differences in insulin sensitivity, fat disposal, and the effects of exercise between individuals. He has been particularly interested in the ability of the pancreas to compensate for insulin resistance. In the early stages of insulin resistance, blood glucose levels do not change because the pancreas can increase insulin production to compensate for the fact that

insulin resistance increases the difficulty of getting glucose into cells. But eventually the pancreas becomes unable to compensate, which results in higher blood glucose and lower levels of insulin. Dr. Malin highlights the importance of cardiorespiratory fitness for glycemic control and its importance in the production of insulin by the pancreas. Ryan Olson, Ph.D. (assistant professor, University of North Texas) is concerned with exercise, depression, and cognitive function. More than 15% of the U.S. pop-

ulation will experience major depressive disorder at some point in their lifetime. Dr. Olson's research suggests that depressed people ruminate about negative past experiences, and that the rumination contributes to cognitive impairment. In an eight-week

experiment in which depressed individuals did either stretching or endurance exercise, Dr. Olson found that endurance exercise reduced depressive symptoms by 58%, whereas stretching only reduced the symptoms by 22%. Endurance exercise also resulted in greater improvement in cognitive function. A 12-week study of depressed individuals compared the exercise equivalent of walking three miles per hour for 75 minutes per week with walking four miles per hour for 210 minutes per week. The greater amount of exercise resulted in great improvement of cognitive function.



Christiane Wrann, Ph.D. (assistant professor of Medicine, Harvard Medical School) is interested in how exercise improves **cognitive function**. Exercise results in the creation of **new brain cells** in the area of the brain concerned with the formation of new memories. A study of healthy elderly people showed that those who did **endurance exercise** for six months experienced increased brain volume in the prefrontal and temporal cortex, the brain areas that normally show the greatest agerelated deterioration. Dr. Wrann has been most interested in a protein

called **irisin** that is secreted from muscle during exercise. She has found that irisin release is caused by another exercise-induced protein, **PGC-1 alpha**, which is a primary stimulator of mitochondrial bio-

genesis. Irisin reduces insulin resistance and obesity, and PGC-1 alpha has been shown to prolong lifespan in mice.

Michelle Motolla, Ph.D. (professor, Western University, Ontario, Canada) studies the effects of exercise on pregnant women. Dr. Mottola has shown that pregnant women who do not exercise are **2.5 times** more likely to give birth to an overweight infant, and **three times** more likely to develop high blood pressure. Every 2.2 pounds above average birthweight is associated with a **12%** higher risk of dying from cardiovascular disease when the child

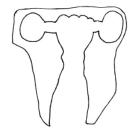
becomes an adult. Women who exercise while pregnant reduce the risk of having an overweight newborn. Nearly half of the women who develop diabetes during pregnancy (called gestational diabetes) will have an overweight infant. These infants are likely to become an obese, diabetic adult. Dr. Mottola has conducted a clinical trial showing that exercise during pregnancy reduced the incidence of gestational diabetes and prevented excessive weight retention in the mothers after they gave birth.

Exercise can do much to re-

duce the disabilities of aging, prevent diabetes, and reduce the risk of dying from cardiovascular disease Physicians often find it easier to pre-

scribe a pill rather than to prescribe exercise, despite the fact that exercise may be more effective. Patients also often find that it is more convenient to take a pill than to exercise. Exercise is a medicine without the side effects of a drug. Too many people avoid experiencing the benefits of exercise at too great a cost.

Information compliments of Ed Kellogg



Stomach Vacuums

This will definitely help you get a smaller waistline and gain control of your abdominal muscles. It's true for a few reasons: stomach vacuums can only be done on an empty stomach, so a good time to practice them is when you first begin to feel hungry. By doing so you will chase hunger pangs away for about 20 to 30 minutes before they return. I have always found my waistline to improve when I would stay hungry longer. When you are hungry it's a sign that your body is beginning to burn the fat from it's largest storage area. And as you stay hungry longer and then eat smaller amounts of food when you do eat, your stomach size will shrink. This has been my experience. Here are some progressive steps in practicing stomach vacuums:

The easiest way to vacuum is hanging upside down, or if this is impractical (I used to do it with gravity boots, but you don't seem those around too much anymore) do them on a steep decline with your head much lower than your feet. The more the decline, the more gravity will assist you in vacuuming. I do



them on my traction table which gives me a decline of 30 degrees or even lower if I wish. Next in difficulty is lying on your back on a flat surface. Next is bending forward at the waist with your hands resting right above your knees. And most difficult is with both hands behind your head as in the abdominal pose. In competition I made quite an impression with my posing routine by going from abdominal pose with abs tensed right into stomach vacuum.

The steps in vacuuming are the same no matter what the position of your body. First you exhale, forcing all the air out of your lungs, squeeze the last bit out with your abs. Then, instead of inhaling, suck your stomach in as far as possible creating a hollow below the ribcage. It's like holding your breath with no air in your lungs. Hold it for progressively longer periods of time. Imagine your stomach wall is pressing against your

spine with each vacuum. Exhale, take a few deep breaths, and repeat. Each time you practice do 10 vacuums. Within a few weeks you will have a more impressive stomach vacuum, you will have more control over your abdominal muscles, and your waist will get smaller.

The stomach vacuum pose looks especially impressive when you have well developed serratus and intercostals.

Dumbbell pullovers super setted with **stiff arm pulldowns** is what developed my

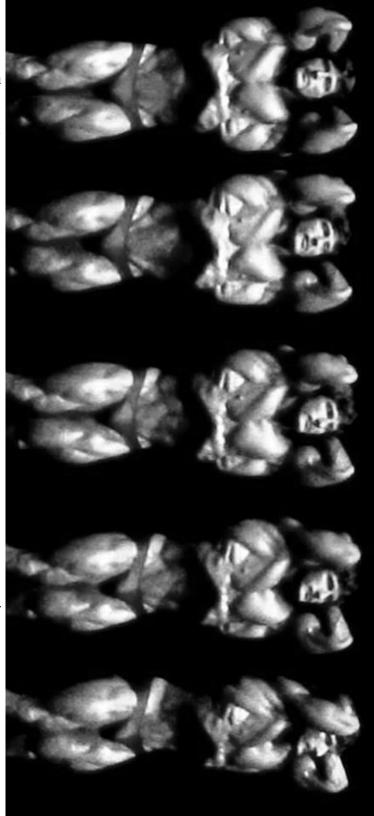


serratus after many years of doing them, to the point where I

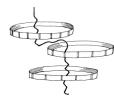


had the best vacuum pose of any-

one. Being able to do this pose is a great equalizer in bodybuilding competition.



Try Tri Setting



There are different ways to arrange your sets of exercises in a workout.

There's **single sets** where you get a good rest between sets so you can go heavier each set. This is the best way to build muscle size.

Super sets means doing two exercises in a row, one following the other without rest between the sets.

I like doing a compound big muscle group exercise first (like close grip bench press) followed by pressdowns, a triceps isolation movement. I like super

sets because



it moves a workout quickly and I get a great pump.

Tri sets are done by adding a lighter exercise to immediately follow your second movement. It's a good idea to include a movement for an anjacent bodypart to prevent muscle fatigue.e.g. one arm dumbbell extension, one arm cable kickback, one arm cable side raise.

Here's a tri set routine for upper back, rear delt specialization:

Front Pulldown
Cable crossover behind neck

Dumbbell upright row

We call any sequence of four or more exercises a **giant set** and although I never do them do except occasionally for ab work. Don't like them because after doing thee continuous sets one's focus is diminished and it becomes more challenging to pay strict attention to what you are doing. So it's best to go light and do giant sets for endurance, trimming, toning. For abs I might do leg raise, situp, seated twist, hanging knee up, 2

arm cable crunch in succession for abs.

But let's focus on a great rear delt—upper lat—trap ri-set.

Front pulldown pulled all the way down to upper pecs in clavicle region

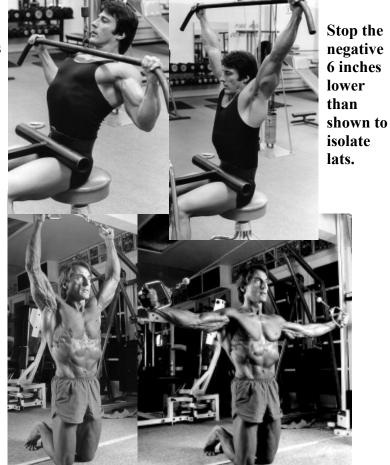
and let back to an elbows unlocked position keeps tension on the upper lats without transferring the load to the deltoids

Cable crossover behind neck works upper lats without working biceps but gets a bit of triceps stimulation

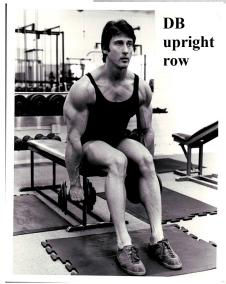
Dumbbell upright row hits the traps and rear delts and even pumps up the biceps.

The result of doing several tri sets of these three exercises will result in a fantastic pump. I feel wider as I'm doing 3 sets of 10 reps each exercise

Front Pulldown



Cable cross over behind neck





Build your Neck

The first time I noticed my neck growing was in high school my jurior and senior years. It was from the neck exercises we did for football practice. In the years following I didn't do much direct neck work only the small amount I got

from shoulder shrugs and upright rows.

It wasn't until I started trainig more seriously for competition that I did more trapezius work and my neck

kept up it's size from dumbbell shrugs. But it wasn't until I began doing deadlifts and deadlifts from knees up that my traps, deltoids, and neck increased in size.

I took a wider than shoulder width grip. It was an overhand grip and I used weightlifting straps. It's too much stress on the lower biceps when one hand is reversed as in competitive deadlifting and man have ripped their biceps doing this. So I would start with 135, the Olympic bar with two 45s for 12 reps, 185 for 10, 225 for 9, and then

I'd raise the bar to knee heigthon power rack and do 275 for 8 reps, 315 for 7, 365 for 6, 405 for 5. I was careful to do very slow negative so I didn't hit one side of the bar on the power rack as I went all the way down to the pins. (I'd previously pulled my lower back out doing this). These days I do no

deadlifting but instead do lots of upper back and rear deltoid work. low cable row, cable crossover behind neck. rear deltois machine, machine shrugs.

shrugs My neck gets a little sore from shooting archery so after I shoot I always work upper back and deltoids. Today I did

Front pulldown super setted with cable crossover behind neck

Low cable row super setted with rear deltoid machine

Pec deck super setted with Dip machine

Whereas when starting I was only able to use 10 pounds on cable crossover behind neck now I'm





dumbbells at your sides in a neutral grip then raise your shoulders upward by pulling with your trapezius. This build vertical height to the traps, something I never wanted to build because it made the shoulders look narrower. But a certain amount of shrugging is a good idea and you use heavier dumb-

Dumbbell shrugs are easy to do. Just hold a pair of

dong 12 reps with 35 pounds.

It's a good idea to do some neck exercises twice a week. If you have a partner she can provide resistance with a towel as shown in the photos. Or, if you are training alone you can attache both ends of a rubber cable under a closed door and put the middle of the cable on your forehed as well as on the back of your head. Do several sets of 15 reps in each position.

bells for this exercise because it's a short range movement. If you lean forward you will work lower down on the traps. You can go face down on a 70 degree incline bench toget a nice angle.



How To Accelerate Injury Healing

By Larry Scott

You can't make an injury better by ignoring the pain. It just gets worse. Also, if you lay off, the pain just "sits there." The method that seems to works best is... to do every thing you can to get circulation into the injured area without

causing extra pain. I mean <u>any</u> <u>pain</u>. I can't emphasize this "no pain" feature enough.

Because...If you grit your teeth and put up with even a little bit of pain, the injury not only doesn't go away, It often gets worse. The exercise has to be totally pain free. I'm not talking about lactic acid pain from the muscle working but "injured joint pain. To make sure it is pain

free, it helps to close your eyes and just "feel". You should be able to distinguish the difference. I know I'm making a big deal about it, but it's very important or the joint won't heal. Especially shoulders.

In fact let's talk about shoulders because they are the most susceptible to injury and the most difficult to heal even though they give you a wide range of options to achieve "pain free movement.

The healing "potion" consists of using " very Slow negatives.

First, in order to not only detect

exactly where and when the pain is coming, the exercise should be done very slowly with a light weight so you can detect exactly when the pain occurs. When you feel the pain, lighten the weight and or move the elbow, the wrist, or change the body position whatever it takes to get rid of the pain. In this way, you can still do the exercise and rehabilitate the injured joint at the same time. The exercise should be done as follows: assuming you were working on getting rid

of the pain in a shoulder, with the arm extended. lift the weight rapidly to shoulder height, then slowly lower the weight doing 5-10 reps with each negative taking 10 -15 seconds. Note: It is very important that you find a weight and movement that causes absolutely no joint pain." Lactic acid" pain is all right because you are working muscles, but this what you want

because the lactic acid will encourage more circulation which will flush out the injury debris accelerating the healing.

Once you've got the "pain free" track nailed down, you're on your way to rapid healing.

Sometimes the pain is persistent and won't go away even with this "Slow Movement" type of exercise therapy. If the pain persists, follow these rules and your recovery should be <u>much faster</u>.

Rule #1 --Once you get in-

jured... everything changes. Forget about your current rate of progress. Your new goal is to heal the injury. Focus all your attention on getting better.

Rule #2 - Don't lay off... It doesn't help. The pain just stays with you... It doesn't seem to matter how long you lay off. You must actually work the injury out of the joint. Which leads to the next rule

Rule #3 - Find exercises that cause no pain. This is important! When I say no pain, I mean no pain. Not pain

that is tolerable or less than it was. I mean no pain. Simply put... pain sets up a histamine reaction which causes swelling and blocks circulation just like your nose plugs up with allergies...That's why you take antihistamines to reduce the swelling. Using pain-free exercises gets circulation into the injured area. Note: the exercise has to be pain free even before you warm

free .. Once you have found the pain free movement, lift the weight rapidly over head, then very slowly lower the weight or hold it steady in one place until you get tired. Use all three kinds of strength to fully flush the injured area with fresh blood. This will accelerate the healing tremendously. Quite often you will find one session of using this slow movement (using the 3 kinds of strength) will temporarily remove the pain. Rule #5 - For complete healing is pain free.

right or left to find a track that is pain

repeat the above until your shoulder

Rule #6 - Ice the injured area each night until it goes numb. Your body will sense the cold and send more nutrient rich blood to the injured area. Be careful you don't overdo it and get frostbite.

Rule #7 - Take aspirin about every three hours. It is a mild antiinflammatory and allegedly thins the blood to aid in pen-

etrating the swollen tissues. Don't take it before workouts as it will mask pain. You need pain to tell you when you are re-injuring yourself.

Rule #8 - Don't ignore the first signs of pain. Be alert on every exercise. If you feel a little tinge of pain, either make adjustments in your exercise form or stop the exercise and go to something else. Most of the damage can be avoided if you're alert to the very first signs of pain. (Joint pain, not the lactic acid pain associated with muscles working.)

up the joint. Not after. (I know, you want to go back to your favorite exercise and it truly doesn't hurt as much as it did before but you must avoid any pain.

Rule #4 - You must find exercises that don't cause pain without any warm-up. The muscle has three kinds of strength: positive, negative and static. You can use this knowledge to accelerate the flow of fresh blood to the injured area which will accelerate healing. Eg. When healing a shoulder injury, try the following.... Get a 5 lb weight and find a movement that doesn't cause any joint pain. You may have to twist the wrist to the

Failure is Not an Option



The passing of Nautilus inventor Arthur Jones brought to mind his system of training. Doing one set to failure was new to bodybuilders in the early 1970s, everyone did multiple sets. But Jones con-

cluded that after a light warm up set doing repetitions with a four second negative and a 2 second positive produced more muscle growth. And this system of training does work, as I subsequently learned, and in my later training years I've adopted a somewhat similar method of working out. You might describe it as doing two sets of each exercise to near failure.

The point of contention here is what constitutes failure. The idea is to select a weight you can perform 8 to 12 repetitions with and do your reps in this range until you can do no more. But the term failure implies you actually fail with the weight, you miss the repletion and can do no more. You need a spotter to assist you with the failed rep. Physiologically this system works, it does produce muscle hypertrophy. (I used to

think this word meant "to win many trophies" but now I know it means muscular growth). Psychologically, however, going to failure has negative implications. Why?

Based on what I've observed in my own 50 plus years of training and studies in behavioral psychology, failure is a form of punishment. In school you don't get promoted when vou fail examinations. You might consider each set like an examination. Forms of punishment like failure are behavioral deterrents. They do not promote a desire to continue with the behavior. Keep failing in school and you eventually quit, get held back, or get expelled. In the words of bodybuilding legend Bill Pearl, "Going to failure is not a formula for success". I agree.

Whereas most who use the one set to failure system are actually doing two sets, my system also uses two sets, the first 10 to 12 reps with a





lighter weight in good form and slow negatives. Immediately afterwards I stretch the muscles involved for 15 seconds, catch my breath, increase the weight and do 8 to 10 reps in good form, making sure always to succeed on my last repetition. I use no spotters...the idea of self sufficiency appeals to me more than depending on someone to help me with my workout. You might say my sets are 95 to 98 percent total effort sets.

But let's suppose I'm doing my last set with my goal being to do 10 reps with the weight I've selected. On the completion of my eighth rep, doubt crosses my mind as to whether I can do the next rep. Rather than strug-

gle with the 9th rep using poor form and risking injury, I choose to end the set. Yes the set is over when doubt crosses my mind. But if I'm in serious training, preparing to reach my physical peak for the year, I might do one of two things: 1. After I stop the set, rest 20 to 30 seconds and then do the two extra intended reps using slow negatives. This system is referred to as the "Rest-Pause" technique. 2. Simply

lighten the weight and do a "drop set" performing reps until I get a maximum pump in the intended area. Rest pause is more conducive to building size, drop sets are better for increasing definition. Both are safer than going to failure. And you always succeed.

Another side effect of always training to failure is you may begin to set your failure limits at a lower level. I know if I have to go to failure on each set I perform, I do not look forward to my workouts. It's hard to get enthusiastic about failing. Going all out on every set can be counter productive. A champion 100 meter sprinter once told me that to give your best performance you must sprint at the 95% level, just enough effort so the muscles in your face are relaxed enough to smile. If you go all out 100% you will not get enough stretch and extension to the muscles and your time will suffer. I think the same reasoning should apply to weight training. Always going all out leads to overtraining, injury, and loss of motivation and enthusiasm It's not an option for me.



Frank with Mike and Ray Mentzer both proponents of training to failure.

4 Levels of Aging

©2006 Ed Kellogg, Ph.D.

Part 1: Basics

Han: "It is defeat that you must learn to prepare for."

Williams: "Man, I won't waste my time with it. When it comes, I won't even notice it."

Han: "Oh, How so?"

Williams: "I'll be too busy looking good!" (Enter the Dragon, 1973)

In this classic exchange, William's attitude might also apply to committed body-builders confronted by aging. But does defeat seem as inevitable as the villain suggests? And even if so, could we possibly slow down the aging process long enough to live to a time when this no longer holds true?

In his book *The Singularity Is Near:* When Humans Transcend Biology, Ray Kurzweil argues that given the current exponential rate of information growth, in a mere twenty years or so it may become possible to postpone aging indefinitely, and perhaps even to reverse it. Even should this not happen, recent breakthrough research in the field of gerontology may have already provided the means through which people can slow the aging process by one third, possibly more.

To understand this research, and how to apply it, one must first understand that the aging process has many components and occurs on a hierarchy of levels, through many different mechanisms. Also, it seems very important to note that aging does not seem a one way street, but results from a dynamic balance between aging processes that lead to damage and loss of function, and rejuvenative processes that reverse aging by repairing damage and optimizing health. Learning how to slow down aging processes and to speed up rejuvenative processes, and then applying this knowledge, gives us an actual opportunity to shift this balance for the better.

Level 1: Intracellular aging occurs at the biochemical level, characterized by an

pression, and even in the accumulation of waste product deposits (lipofuscin). Although subject to outside factors, in large part intracellular aging occurs as a natural consequence of oxidative metabolism, which produces many toxic by-products. Level 2: Extracellular aging takes place at the tissue level. For example, it occurs in the collagen and elastin fibers in the skin, in the tendons and ligaments, and in the walls of blood vessels. It takes place through a cross-linking process that slowly makes elastic tissues stiff, brittle, and dysfunctional. Think of the difference between a new and an old rubber band. One can repeatedly stretch a new rubber band without damage, but an old rubber band will break. A similar process occurs in tendons as a person ages, which explains why older athletes often have more inju-

increasing degradation of DNA, the short-

chondrial function, changes in genetic ex-

ening of telomeres, impairment of mito-

Level 3: Physiological aging occurs at the organ level, and describes not only a loss of function in organs and organ systems, but an overall loss in physiological balance as hormonal production changes, and as the physiological effects of hormones decrease because target organs no longer respond as they should.

ries. This process occurs throughout the

ing (such as AGEs, see the article

tracellular aging as well.

body. Factors that affect extracellular ag-

Optimizing Protein for Long-term Health"

in the Summer, 2006 issue) can affect in-

Level 4: "Wear and tear" aging occurs at a gross, structural, level. On this level, to quote Indiana Jones, It's not the years, . . it's the mileage. Exposure to overwhelming mechanical stresses can cause bones and teeth to break, tendons to tear, and eardrums to rupture. Diseases, and unfortunately even some therapies used to treat diseases, can cause damage worse than aging as such. And as the years pass, aging processes at the microscopic level impair tissue functionality and resilience. The body slowly becomes less resistant to

stress, and increasingly vulnerable to "wear and tear" damage.

Even so, up to about the age of seventy, on a functional level most aging effects result from avoidable extrinsic factors, and not from intrinsic aging processes. Even some kinds of "cosmetic" aging, like skin wrinkling, does not result primarily from aging, but from decades of exposure to the sun. A person blessed with good genes, living a reasonably optimal lifestyle, AND

who has the good luck to avoid "the slings and arrows of outrageous fortune", may experience only minor functional losses under normal conditions well into their seventies, though probably not while running a marathon. And if one could live a perfectly optimal lifestyle - no exposure to carcinogens, pathogens, environmental pollutants, toxins in food or water, loud noises, eating an optimal diet, etc., I expect that this could prevent most functional losses even into one's eighties or nineties. However, given time, even with minimal "wear and tear" damage, underlying aging effects at the cellular and extracellular level will eventually become significant enough by themselves

to negatively impact functionality and quality of life.

Although it makes sense in theory to separate disease processes from aging processes, in practice the two seem inextricably linked. Regimens that prevent diseases also prevent functional losses associated with them. For example bodybuilders can prevent, and even reverse, sarcopenia, a loss in strength and muscle tissue, a problem of epidemic proportion in senior citizens who fail to exercise adequately. Minimizing one's exposure to environmental stressors can also help preserve youthful function. For example, an eighty year old man who has spent his life in a quiet African village may have better hearing than many American teenagers.

Finally, in thinking about one's age, it

makes sense to distinguish between your chronological age, defined as how long you have lived according to the calendar, and your functional or biological age. A fifty year old man who has lived a healthy lifestyle may have a body equivalent to men ten, or even twenty years younger. Similarly, a thirty year old living an unhealthy lifestyle might have the biological age of someone ten or twenty years older. That said, for most of us aging takes place at different rates in different systems, and at different levels. Also, although genetic and lifestyle factors explain

much of what happens during aging, psychological factors play a very important role. We now have an unprecedented opportunity to learn how to slow down aging processes and to speed up rejuvenative processes. By applying this knowledge we can live longer, healthier, lives.



The Best Ab Exercises

I've certainly done a lot of ab work over the last 50 years. Some think I have naturally good abs, but there's been a lot of effort to get this development.

The abdominal muscles respond best when you work them through a short range of motion. Exercises like full situps or Roman chair situp, full range of motion leg raises, work the lower back as much or more than they effect the abs. My abdominal program isolates abs by limiting the range of motion so that constant tension is felt throughout the movement. Emphasis is on the contraction phase of the exercise, not on the stretching portion which actually contracts the spinal erectors of the lower back. So I would tense the abs hard and hold this contraction for a second

on the extreme "up" position of the move-

der blades in contact with the floor. At the same time thrust the hip a few inches up in the air. Raising head and hips at the same time gives a true "crunch" resulting in maximum tension in the entire rectus abdominal area, especially the upper portion. When head and hips are raised, pause momentarily for one or two seconds, tensing the abs as hard as possible. This takes a little practice at first but it results in a very effective ab exercise. You can also do a twisting crunch by putting one arm behind the head and tilting to one side as you do each rep. Before long you will be doing 100 reps per set like me.



ment. **Crunch- es**—Almost everyone I work with in my Zane Experience training programs is unfamiliar with the technique

I've used for years. What most trainers call a crunch is in reality a partial situp. Lying flat on the floor the head and shoulders are lifted off the ground while the hips remain stationary. This does work the abs but not as well as doing it this way: elevate the feet by putting them up on a bench so that calves and hamstrings form a 90-120 degree angle. Then raise only your head, keeping the shoul-

I super set crunches with 10 degree **incline leg raise**. Place hands under and below the buttock muscles, raise your head off the bench and with knees slightly bent, lower the legs so they make a straight line with the upper body. From this position raise them up until they form a 30 degree angle with the bench. This is probably not

more than 12 inches, any more than this takes tension off the abs and shifts it to lower back. I keep my abs tense the entire movement and feel the leg raises strongly in the lower abs and hip flexors. I've also notice my upper thigh definition always improves when I do lots of this exercise. I do my reps fairly rapidly without stopping until I knock off 100 reps.



I've added seated twist to the crunch, leg raise sequence to form a tri-set. Sit with a short light pole on your shoulders with feet out in front of you and gently twist as far to the left and right as possible tensing the intercostals and obliques as you twist to each

side. As you continue, twist a little further and faster

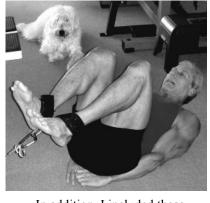
Two sets of 50 reps combined with crunches and leg raises give me 500 total ab reps.

Next, it's two sets of 50 hanging knee up using the upper arm support straps.

knee up using the upper arm support straps. It's important to pull the knees up as far as possible and tense the abs hard on each rep. There will be a tendency to swing unless you do your reps

rhythmically. Once you get the hang of it you have one of the best overall ab exercises, which focuses on lower abs, hip flexors and defines the upper thighs too.

For a basic ab routine I'd do crunches, either incline leg raises or hanging knee ups, and seated twists for a total of 300 to 500 reps three to six times a week. This coupled with a good low carb low fat diet and enough aerobics will eventually result in a small muscular waistline.



In addition, I included these weight bearing exercises later in the day: **Pulley knee ins** — lying on the floor with hands beneath buttocks and ankle straps attached, I'd pull knees into my chest, tensing the abs hard at the completion of each rep, not quite locking out the knees on the stretch portion. I used two

different weight/ reps schemes: 40 lbs. 4 sets of 50 reps or 60 lbs 4 sets of 25 reps.

Next I did one or two sets of 50 reps of **abduction** with each leg on the hip machine with 60 pounds work-



ing the rear obliques. Then one or two sets 70 lbs. 50 reps on **one arm cable crunch** with an overhead pulley with each arm for the frontal obliques and intercostals. Totaling 800 to 1000 reps daily really improved my abs. Be sure to gradually add reps to this routine. Do only as much as you need. Good abs take time to develop.



Ab solutely

Every body is born with abs but few ever achieve outstanding abdominal development. It's a lof of work, at least it was for me. But for some fortunate individuals maybe not. I'll bet these abs to the right had many natural attributes going for them from the start.

First there's the part everyone already has, the linea alba which separates one column from the other. This one is very long and there are 4 rows of symmetric abs giving an 8 pack. The ab separation is not deep and the abs are not thick. Long waisted means good midsection leverage making effective ab work easi-

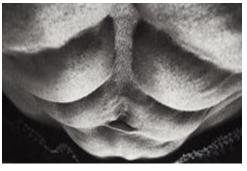


er and a little goes a long way. Bet I did lots more ab work that this guy. Here's an example of a 6 pack almost an 8 pack, the waist is shorter the abs are not symmetric but very developed and impressive with good oblique development. The upper abs although they are visible are not as developed as the next two rows underneath. Partial situps and ab crunches target upper abs.



Bottom photo shows some very thick rectus abdominals with a deeply etched linea alba. Looks like a complete six pack photographed by the guy looking down at his abs. He probable worked these babies with weighted exercises, maybe something like a Nautilus vertical crunch machine. I'm guessing on all these cases since I don't know who these abs belong to and sometimes it's suprising to learn what people actually do to achieve such development. No doubt diet plays a large part in bringing out abs separation and definition alng with aerobic exercise, sports, and lifestyle.

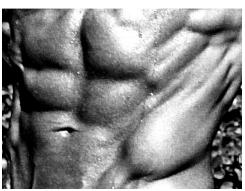
On this page are photos of my abs taken different years when I was in shape before competitions. Top photo is 1982 weight over 200 pounds





my heavies in shape weight ever. I trained with heavy weights that year and did lots of weighted ab work specifically pulley knee ins lying on the floor hooked into a low pulley doing reps in sets of 10 to 20 reps until I reached 100 with weights between 30 and 80 pounds. One and two arm cable crunch for obliques and upper abs rounded out the program I did every workout.

Compared to previous page abs, my waistline is relatively short



and as a result I have a 4 pack with longer upper abs. To compensate for this I've developed my obliques and intercostals to add detail to the middle of the body. This and next top photo are right before 1979 Olympia. I ran 1.5 miles 6 days a week along with high rep ab work every workout, up to 1000 reps total a day, like this:

Incline leg raise 4 sets 50 reps supersetted with Crunches 4 sets of 50
Pulley knee in 40 pounds 4 sets of 25
Hanging knee up 4 sets of 25
Partial situp 4 sets of 25
Seated twist 300 reps each side

Seated twist 300 reps each side Hyperextension 2 sets of 25 Below are abs from my final competition in 1983 at a bodyweight of 185



with pronounced abdominal development. Since my bodyweight was lower than the year before by a good 10—12 pounds my waistline was smaller and tighter with more definition. Diet was a big factor that year, didn't go up to 1000 daily ab reps, maybe did 500 or 600 but kept the carbs low and took lots of free form amino acids, lots of glutamine, leucine, arginine and tons of Super Sports aminos.

All are my abs on this page



We Get Letters

Can you give me a quick breakfast that I can have with my coffee before my workout? I'd rather focus on my upcoming training session and not need to cook up something complicated. JZ, Ft. Lauderdale Florida

FZ: Simply add two tablespoons of Vanilla Zane Whey to your coffee. It acts like a vanilla coffee creamer and you just stir it in your ready to drink cup and enjoy. This adds almost 15 grams of protein along with the coffee boost you get with a meal that is easy





Go down this low with upper body in erect position.

to digest. I have Zane Whey Coffee an hour before my morning workout. **JS writes**: I've been squatting twice a week and I notice my thighs getting bigger especially the upper inner part. Being female I do not want big thighs but I feel that by squatting below parallel my thighs have grown. What can I do to shrink my legs?

FZ: Stop doing parallel squats. Instead try doing sets of 30 reps with quarter squat. It's most comfortable with a Leg Blaster: Place feet with toes pointing slightly outward and heels about 12 inches apart. Keep upper body erect with hips thrust slightly forward. Descend 8 to 10 inches

keeping glutes tensed the whole time. Execute a rhythmic movement with negatives same speed as positive and don't go heavy, rather stay light and

gradually increase to two sets of 50 reps.

LR asks: What is the most basic routine I can use to thicken my back muscles and accentuate my taper? I have a lat machine and a 7 foot Olympic bar.

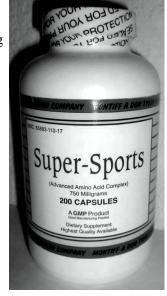
FZ: Concentrate of big muscle group exercises and using your equipment do 5 sets of front pulldown increasing weight 5 to 10 pounds each set with 15, 12, 10, 8, 6 reps using few reps as the weight increases. Pull the bar all the way down to your upper pecs (right below your clavicles) and slowly let the bar returned to an elbows unlocked position. Don't lock out because this shifts tension off your lats and transfers it to your shoulders. Also try wrapping a rubber cable (the green bodylastics cable works best. For exercise number two do leverage row by putting one end of your 7 foot bar in a corner and loading the other end with smaller diameter plates no larger than 25 pounders. Interlock your fingers and grip the bar right behind the sleeve, pull until plates touch below your pecs then lower slowly rounding your back stretching all the way down almost touching the floor. Do 5 sets of 15, 12, 10, 8, 6 reps increasing the bar 5 to 10 pounds each set. This routine totaling 10 sets done twice a week should give you good results.

JF sez: I'm looking to compete within 6 months and want to get as muscular as possible in this time frame by losing 30 pounds. What should I do? My legs get very defined but my upper body always seems to lack deep

FZ: You would not have such a big issue if you kept your bodyweight closer to your muscular target bodyweight. The bulk up train down syndrome always results in muscular size and strength loss and you end up without the power to use heavy enough weights to keep the muscles full. Training heavier at a lighter bodyweight all year will result in a more finished defined appearance. My advice is to get your bodyweight down to the level you need

for muscularity by three months before your contest so you don't have to keep dropping pounds right up to your show. Use a combination of more cardio (running is especially good) working up to a total of 4 to 5 hours a week, and diet eating one gram of protein per pound of bodyweight, 1/3 gram of carbs per pound of bodyweight, and less than 25% of your total calories for fat intake. Eat no more than 10 calories per pound of bodyweitht. Take a good free form amino acid formula like out Super Sports formula. Rest less between sets and cultivate the breathless state during your workout.

Once you get down in this manner you will have enough to to keep doing heavier weights with slow negatives to maintain size and simultaneously increase definition.



A New Treatment for Osteoarthritis

By Andy Coghlan

An antioxidant food supplement widely used to treat conditions including paracetamol poisoning has shown promise in helping mice with <u>osteoarthritis</u>, the most common joint disorder in the world. The only existing treatments are painkillers and drugs that reduce inflammation, but nothing halts or reverses the

condition. When researchers added *N*-acetyl cysteine, or NAC, to the drinking water they gave to mice with osteoarthritis, it reduced the level of joint damage to that seen in healthy, control mice.

The main effect of the NAC was to stifle damage to cartilage tissue in joints,

which is caused by a natural process in cells called oxidative stress. Rik Lories of the Catholic University of Leuven in Belgium, and his colleagues screened gene activity in cartilage samples from people and mice with osteoarthritis. They discovered depleted levels of a protein called ANP32A. Further gene-profiling experiments in diseased and healthy joint cartilage cells revealed that **ANP32A drives production of a**

natural enzyme which halts oxi-

dative stress. This suggests oxidative stress in cartilage cells is a key cause of osteoarthritis – and that a therapy to neutralize the problem could treat the condition. Lories and his team decided to find out using NAC – an antioxidant which neutralizes oxidative stress. When the researchers bred mice unable to make ANP32A, the animals developed severe os-

teoarthritis. But treating them with NAC healed their joints, reducing cartilage damage to levels seen in healthy control animals. Lories says that in people with osteoarthritis, NAC may not reach cartilage in sufficient amounts to heal

damage. His team plans to focus instead on finding ways to boost ANP32A. "Restoration of its [natural] levels in osteoarthritic cartilage may provide better protection against oxidative stress," he says.

Journal reference: Science Translational Medicine, <u>DOI:</u> 10.1126/scitranslmed.aar8426



Stretching

It's the best a mature person can do because if you don't'stretch you will get stiff. A life of stiffness could mean you are headed for osteoarthritis. It's so important to stretch that we do it between sets. Stretch the bodypart you are training as you work it by holding an appropriate stretch for 15 seconds. This helps joints stay limber and maximizes the pump. And you don't have to keep warming up because of all the stretching.

It's a good idea to stretch between workouts too. Day following a workout you might be a little stiff so spend a few minutes stretching the sore areas gently. Keep them warm as you are stretching. Most common stretches



are **one arm shoulder stretch** for shoulders,



doorway stretch for chest,



2 arm lat stretch for back,



one leg up stretch for hamstrings, and one leg back stretch for quadri-

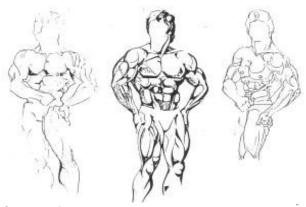
ceps. Go
thru them
once holding
15 seconds
each in the
order listed,
then rest a
minute, and
do it again
holding each
stretch for
20 seconds
this time.
Relax while
stretching.

Say to your-



self or out loud *I am flexible and can stretch my limits.*

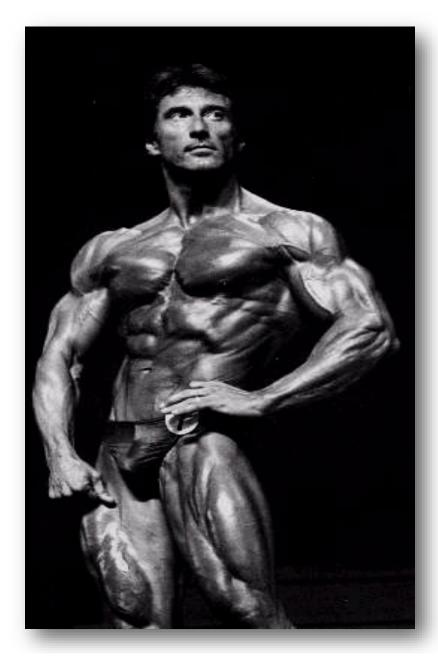
1983



Here's a workout from Summer 1983 contest preparation on my 41st birthday at World Cym Santa Monica 8:30 am: first came dumbbell upright row 205X18, 255X15, 305X15, 355X12 supersetted with machine press 60x15, 70x14, 80x12, 90x10 then chest work for 10 degree incline press on universal machine 80 pounds 20 reps, 100x18, 120x15, 140x10 and dumbbell fly 4 sets of 10 to 12 reps 30, 35, 40, 45 pound when pullover came over with a dumbbells of 75, 80, 85, 90 pounds for 10 to 15 reps and then back worked with low cable row 170×10, 180×10, 190×10, and 200×8 and following was palms facing front pulldown 200x10, 210x10, 220x10, 230x8 without a break did one-arm dumbbell row 90x10, 95x10, 100x10 and close grip pulldown 150, 160, 170, 180x10 finishing my delt, chest, back workout at World Gym but this was not enough so I rushed a mile south to Golds Gym in Venice to use the Nautilus machines like torso row 30, 40, 50, 60x15 for rear delts and traps and behind neck machine for upper lats doing exactly the same sets, reps and weights as on torso row and so I finished with 2 way chest machine fly then press 50, 60, 70, 80x10 on each 2 part movement was my best then incline leg raise 4 sets of 30 reps supersetted with Roman chair 4 sets of 30 too, then 100 seated twists and 20 hyper extensions was just about all I could do

a grand total of 48 set at two gyms, finished at 11:30 am went home went out to celebrate and ate birthday cake too.

MZNMZN



Frank as he appeared in the 1983 Mr. Olympia in Munich.
He was 41 and weighed 183 in this last competition.
This was perhaps the most defined condition
of his entire 23 years of competition.
This was also the first year he used the Leg Blaster
as part of his leg workout contest preparation.

Negative Body Metaphors

A negative body metaphor is a negative statement involving the body. My experience has shown me that there is a correlation between lack of progress in body building, accidents, injury, illness, and misfortune with the figures of speech (metaphors) we use to express ourselves.

Such negative body metaphors litter the speech of most people and are reflected in the condition of their bodies. Negative body metaphors have at least one of three characteristics:

- 1. They contain the word 'pain' (e.g. "That's a pain in the neck".
- 2. The begin with the prefix 'That makes me...' e.g. "That makes me sick'.
- 3. They mention a part of the body or a function of the body. (e.g. "I can't 'stand' that').

When people use negative body metaphors they are implying that they don't like or disapprove of something. But instead of stating it simply as "I do not approve", they route it through the body and ultimate create unnecessary

suffering. Listen to the words of others, listen to your own speech. When you utter one, simply say "cancel that" and rephrase the statement in a way that doesn't involve your body.

By practicing self observation you will discover your mind can take what you say in a literal way and allow your body to act on it. As a result you may act in a manner to make your figures of speech come true. I've observed in myself as well as in others that the figures of speech people use are descriptions of what's ailing them. I

know of people with chronically sore backs telling others to 'get off my back'; nauseated people telling of experiences that 'makes them sick'; clumsy people saying "I can't handle that'. Not only have their lives become unpleasant, but they are creating unnecessary suffering in their bodies. It's challenging enough to building your body without adding the extra encum-

brance imposed by habitual use of negative body metaphors. Be kind to your body by finding a better way to express yourself.

A friend who was experiencing a challenging situation once said to me "Doesn't that give you a headache". Not wanting a headache, I answered "No, I'm wondering how it might work in a positive way". He wanted me to go into agreement with his negative body metaphor. Don't fall into this trap. Many people have been doing this for so long, are totally unaware of this negative behavior and it's ramifications, that they often think it's ridiculous and are reluctant to change. You may even be one of these

people. I'm not asking you to believe me, but observe the words people use to express themselves. Listen to yourself talk.

I paid the price for wrong speech in the past. Now I don't talk this way. I carefully select the best words to use to express myself and I don't go into agreement with the negative metaphors of others. Wrong speech involves the use of pun or play on words. "You're a pain in the neck" may refer to a person you don't like. But a pain in the neck is also something physical and very real. I was guilty of us-



ing this negative body metaphor in the past, and by unconsciously using my body to express my dislike I found my neck hurting much of the time. Such pains don't magically or mystically occur, we create them by our actions. I remember once going to the gym and doing heavy power barbell cleans without warming up after complaining about people who were a pain in the neck. This began to teach me to listen to what I said and how I said it and then observe my subsequent physical actions and reactions. I learned that past history was stored in my body, and since history tends to repeat itself, it was up to me to create my future according my real bodybuilding goals.

What happens in the course of growing older is often body entropy, a gradually loss of energy, muscle, and the joy of living. I feel this is connected with negative beliefs about aging and exercise and the unnecessary use of negative body metaphors. Negative body metaphors show negative self conception. This is correlated with the development of physical ailments which hinder bodybuilding progress. Since we also grow wiser with age —'If I only knew then what I know now' — we should come to realize how we impose barriers by self limiting thoughts, words, and behaviors. Intention always precedes action. Only until we recognize how our actions are predetermined by what we think and what we say can we take steps to change erroneous attitudes.

Commonly Used Negative Body Metaphors.

Here is a list people often use in describing their experiences and their possible consequences:

"Oh my aching back".....back pain

"No one ever backs me up".....back problems

"Get off my back"poor posture

"Pain in the ass".....buttock problems

"I can't handle that".....hand and grip issues

"I can't grasp that"......cannot hold on

"Foul tastes in my mouth".....bad breath, poor taste

"Nothing moves me"laziness, constipation

"I can't stand that" Poor thigh, calf development

"I don't want to hear it"..... Hearing problems

"I don't want to see that" poor vision

"I can't face that" ugliness, bad complexion

"Shouldering a heavy load" ...posture, shoulder issues

"I can't stomach that".....indigestion, nausea

"Can't get it off my chest"...chest, breathing difficulty

"I'm fed up"...... Poor appetite, overeating

"That's hard to swallow" Throat problems

"That makes my skin crawl" Rash, pimples

"That's a headache"..... Headache, migraines

"Glutton for punishment"overtraining, overeating

"Died of a broken heart"coronary problems

"Something's eating me"cancer

"That kills me", "to die for" Death

"I wish I were dead" \ldots . You will be soon enough

"That pisses me off" Urinary problems

Cut them out!



31 Day Wonder Posing



I always considered body-building to be more of a performing art rather than a sport. To me a sport has objective standards for selecting the winner. Who runs the fastest, lifts the most weight, who has the best form (as in gymnastics —

there is some subjectivity in this one) is the winner. Not so in bodybuilding, the judging is subjective, a matter of preference, a value judgment, and although an experienced eye can tell who should win, who does



win is often a matter of opinion. So a competitor must do his best to convince judges he is the best, he must act like the winner. I could do this most ef-



fectively when I knew I was in my best shape, I couldn't pretend. If there was the slightest doubt in my mind, I would unconsciously project it in my mannerisms on stage. That's why feedback on what you look like before competition is so important. When I

knew I was as good as I could possibly be, I felt "I have already won" and this became my mantra. The secret to winning is to win it ahead of time, be so thoroughly convinced and sure of success that your impressions on everyone leaves no doubt in their minds. After all, there is no doubt in your mind.



Don't worry about anyone else. If you do, it just drains you of energy that you could be focusing on your preparation. Your training has nothing to do with what anyone else looks like. All that matters is what you do, how well you prepare. This kind of attitude is very important. I had it the three years I won Mr. Olympia, other years were less than perfect. Now here's how to prepare your posing for your big event.

There are three rounds you are judged on

so there are three ways you must practice: The first is the **standing** "relaxed" round. But nobody is standing relaxed, they're up there on stage with their arms sticking almost straight out to the side looking like robots. The idea is to stand out, look different, so



don't do what everybody else does. Stand like this in a posture of excellence:

Next comes the **compulsory poses**. Judges call them out one by one and you strike each pose. It's best to hold each pose until they call the next one and then flow to the next pose just like you would in your posing routine. First pose



is front double
Next pose is
front lat spread
Next is Side
Chest pose
then comes back
double biceps:
Back lat spread
comes next.
Then do the side
triceps pose.

Abdominal pose is the final shot. Put your arms

behind your head, exhale completely,

tense your abs, tense everything except your face. I always put a slight twist in this pose, it makes it look more interesting. It's important to have great abs and look good in this pose because it's the last one. When I did it I snuck in the stomach vacuum which is not a compulsory pose, but should be. It would eliminate some of the big bellied monsters competing today.



Free Posing

This is the final round where you put a



posing routine together in synch with music. In most contests one to one and a half minutes is allowed for the presentation, so you need about 12 poses. Start with your best pose and finish with your best shot, .

I've helped a lot of competitive bodybuilders get their posing routines together in the Zane Experience program. Many have won their competitions. But I can only guide, it's up to the individual to do the work.

The secret to being your best for a competition is the preparation. Anyone can get in shape, but



the mark of a champion is to get into peak condition exactly at the right time for the contest. Not a week before or a few days after, but ready for the afternoon prejudging and the evening presentation as well.

Practice posing every evening for a half hour the last month. Never practice on a full stomach. Your waist-line should be small when you compete. Practice stomach vacuums by bending forward at the waist and exhaling all the air out of your lungs with your abs. Then instead of inhaling, suck in your stomach as far as possible creating a hollow below your ribcage. Then do this with your arms behind your head going from abdominal pose to vacuum

To keep your waistline small eat smaller meals every few hours the last 2 weeks. Do not stop drinking water to dehydrate.

This can be very dangerous.
Most competitors don't practice posing enough. Remember physique contest are about presentation, not about working out with weights. You will have an edge if you put time in on your posing. You will get in fantastic shape doing it.



Mind Muscle Machines

Human brainwaves, as measured by electroencephalogram (EEG), represent the electrical firing of the neurons of the central nervous system. It is through these electrical signals that the brain communicates within itself and with other organ systems. Coherent and functional brainwave patterns are required for the processing, execution, and successful completion of a task, whether it is

physical (e.g., walking) or mental (e.g., solving an algebra problem). In healthy individuals, specific brainwave patterns are associated with various mental states.

Within the five common brainwave bandwidths (delta, theta, alpha, beta and gamma) subcategories (high, low alpha and beta, and sensorimotor rhythm) have been identified for different mental activities. Specifically, delta activity (0.5–3 Hz) is dominant primarily during deep sleep. Theta activity (4-7 Hz) is typically seen in drowsy and relaxed states. Low alpha (8–10 Hz) is the dominant brainwave bandwidth observed during meditation and the state of turning inward (daydreams, dissociation from external stimulation). High alpha (11-12 Hz) is associated with creativity and the alert but calm state needed for peak performance. Sensorimotor

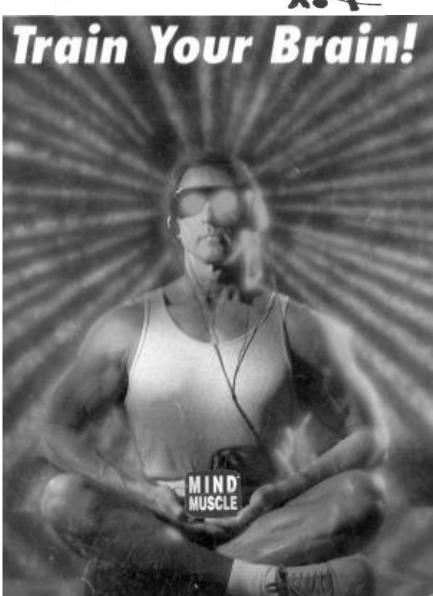
rhythm (13–15 Hz), Psychophysiol Biofeedback categorized as low beta, is thought to occur predominantly in the still state before a reactive psychomotor action. Low beta (16–20 Hz) is associated with intellectual activity and problem-solving. High beta (21–37 Hz) is found in emotional and anxious states; and gamma activity (38–42 Hz) is associated with attention and intense cognitive activity. In addition, excessive beta and gamma activi-

ty has been observed in people in a hyperaroused state (e.g., stress, anxiety, or insomnia).

The Kasina is our top of the line model and is rechargeable. All one needs

to do is insert the earbuds, put on the Deep Vision goggles, select one of the many programs ranging from meditation, energizing, sleep, concentration and relax. I start with my eyes open to see vibrating colors and let them close on their own to encounter waveforms. The sounds of the Kasina are spectacular (as compared to the pulsating beat of the Proteus). They range from nature sounds like waterfall, ocean waves, crackling fireplace and I find using the Kasina deeply refreshing. I like my Kasina for deep afternoon meditation sessions. This units is the foundation of my portable mind gym.





The Best Way to Squat

Forget barbell squats, front squats, hack squat. Leg press, standing calf machine! It is possible to replace all these exercises with the Leg Blaster.

You can work your calves and thighs
And maximize muscle size
It's easy on your back and knees
Definition will be a breeze
With Leg Blaster
Safe and comfortable it's sure to please
Squatting as simple as one two three
Use a Leg Blaster you'll know what I mean





FRANK ZANE SIGNATURE CALF BLASTER

Frank Zane LEG BLASTER tm



SQUATS MADE EASY

The LEG BLASTER tm made in the USA

Forged from heavy 11 gauge steel, the Leg Blaster gives you the benefit of all versions of squatting while reducing stress on lower back and knees: full or parallel squat, front squat, hacks, sissy squat, plus standing calf raises, even lunges!



Squatting is the best exercise for developing the thighs and building lower body strength. But aside from the pain of holding the barbell on your shoulders, heavy squatting is hard on the knees and lower back and will enlarge the buttocks and waist.



Now it is possible to develop your legs without having to endure the discomfort of barbell squats.

The **Harness** fits over your shoulders, weighs 25 pounds, is comfortably padded at body contact points, 43 inches long from tip to tip and has a sta-

bilizing latch for easy connection to the rack, preventing tipping while loading with either regular or Olympic plates (not included). The side



weight bearing arms of the harness angle downward giving you a lower center of gravity, making it easier on knees and low back. You'll find it safer and more enjoyable to build, shape and define your legs. The Leg Blaster **Rack** holds the harness while you load it.

The harness is engineered to hug your ribcage when you squat with your upper body in an erect position, making it unnecessary to use a lot of weight to get to get results. Even though the unit is very strong, it is not necessary (or possi-



ble) to use much over 200 pounds when squatting in this fashion. The best I've done is 10 reps with 180 pounds. I've been squatting exclusively with it for over 25 years.

Here are my legs at age 64.

Your hands are free while squatting so you hold on to the balance bar to prevent unbalanced crooked reps. You stand on the secure footplate, making the rack entirely free standing and there is no need to bolt it to the floor. It's compact size (32 by 42 inches) allows you to fit it into the most crowded gym.



And it's easy to put together, there are only 3 bolts to attach: Using two 3/4 inch wrenches, first attach the balance bar in the lower hole if your are shorter, or the upper hole if you are taller than 5 foot 9 inches. Next, slide the vertical member over the rear vertical tube, insert the two bolts and tighten. Put the end caps on the rack, load it up and it's ready to use!

First place your feet near or at the front of the foot plate:

Then duck under the harness and with hands going over the top of the rack, grab the balance bar and lift the harness straight up out of the slot:



Let your arms straighten out so your upper body is leaning back slightly with the harness pressing against your ribcage. Keep the harness resting on your ribcage as you slowly descend into a full squat position while keeping upper body erect. THE HARNESS SHOULD NOT



TOUCH THE TOPS OF YOUR THIGHS IN THE LOW POSITION. Do not bend forward or stick your butt out as is customary in regular barbell squatting. It's best to start with a light weight and increase the weight each set. My current



workout is 100 x 15, 120 x12, 140 x 10 reps. It's great for calf raises too. You will not find a better way to squat or do standing calf raises.

Visit my website FrankZane.com

Frank Zane *LEG BLASTER* PO Box 1964, La Mesa, CA 91944.

The Leg Blaster is a bargain considering how effective it is. Don't endure another tortuous barbell squatting workout. Many who have purchased the Leg Blaster tell us "My only regret is that I did get a Leg Blaster 10 years ago!"

THE PEAK PHYSIQUE PROGRAM



There is always more progress to be made. So why not continue your training and do this 12 day three way split program?

There are lots of tips, details, and recipes in *Zane Bodybuilding Manual* so consider checking these out. You need to keep working out on a regular basis if you want to go beyond your current development and state of fitness. By practicing the 3 different three way split routines you will learn which 3 way split you prefer

We start with the **Growth Routine** as described in *the Manual*.

DAY 1: back, biceps, forearms, abs DAY 2: abs, thighs, calves

DAY 3: chest, shoulders, triceps, abs

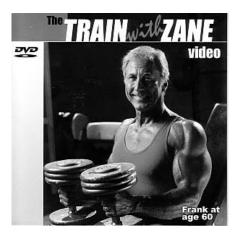
Train three days in a row and rest the fourth day then switch to the **Let's Grow routine** continuing to train three days on one day off:

DAY 1: back, rear delts, triceps, abs
DAY 2: abs, thighs, calves
DAY 3: chest, front & side delts, biceps, forearms, abs.

Next switch to the **Zane Experience routine** working Torso (back, shoulders, chest) on day one, Legs (thighs and calves) on day two, and Arms (triceps, biceps, and forearms) on day three. It is easier to train three days in a row because the workouts get less complicated as they progress. The first day torso workout is harder than the leg workout, and the arm workout is easier than the leg workout.

DAY !: Back, shoulders, chest, abs DAY 2: Abs, thighs, calves DAY 3: Triceps, biceps, forearms, abs

Short of coming to train with me in a Zane Experience program, my workout DVD is the next best thing. I show you good form in all the movements. How you arrange the exercises is up to you for experimentation but following your favorite of these 3 way splits is a good guide.



Condensed Peak Physique Program

If you can take it, the following program will get you in better shape in two weeks!

DAY 1

Pulling muscles Back, Biceps, Forearms— Do 3 sets of 12,10,8 reps increasing the weight each set and stretching between sets

Weight Reps Sets

Wide Regular Grip Deadlift From knees up

2 arm lat stretch

Leverage Row

2 arm lat stretch

Front Pulldown

One arm shoulder stretch

1 Arm DB Row

One arm lat stretch

! Arm DB Concentration Curl Pronated arms back stretch

Alternate DB Curl

Pronated arms back stretch

DB Incline Curl

Propaged arms back stretch

Barbell Reverse Curl Super setted with Barbell Wrist Curl Pronated arms back stretch

Hanging Knee Up

Crunches

Seated Twist

Diet Recommendations

Breakfast — Scrambled eggs with cheese

Lunch — Protein drink

Dinner — Grilled fish with vegetable or salad



Lower Body: Abs, Thighs, Calves—do three sets of 10 to 15 reps on thigh work, 15 to 25 reps on calf and abdominal work.

Weight Reps Sets

Leg Raise

Crunches

Seated Twist

Leg Extension

1 leg back stretch

Leg Press

lleg up stretch

Barbell Squat

1 leg back stretch

Leg Curl

1 leg up stretch

Hyperextension

Standing Calf Raise

Calf stretch

Donkeys

Calf stretch

Seated Calf Raise

Calf stretch

Diet Recommendations

Breakfast — Soft boiled eggs with cheese

Lunch — Chicken salad

Dinner — Broiled fish with baked yam

Pushing muscles Chest, Shoulders., Triceps—Do 3 sets of 12, 10, 8 reps increasing the weight on each set.

Weight Reps Sets

70 degree incline dumbbell press *Doorway stretch*

30 degree Incline DB Press Doorway stretch

Decline DB Fly

Doorway stretch

DB Pullover

One arm shoulder stretch

Close Grip Bench Press Arms back stretch

1 Arm DB Extension

One arm shoulder stretch

Pressdown

Arms hack stretch

Bent over Laterals

Rear deltoid stretch

Side Cable Raise

One arm shoulder atretch

Abs:

Hanging Knee up

2 Arm Cable Crunch

Seated twist

DAY 4
Is a REST
day

Diet Recommendations

Breakfast — Whole grain cereal

Lunch — Tuna salad

Dinner — Roast turkey with vegetable

Back, rear & side deltoids, triceps, abs Continue doing 3 sets of 12, 10, 8 reps

Weight Reps Sets

Top deadlift

2 arm lat stretch

Front pulldown

2 arm lat stretch

Low cable row

2 arm lat stretch

Cable crossover behind neck

1 arm shoulder stretch

Bent over lateral raise

rear deltoid stretch

Close grip bench press arms back stretch

Lying triceps extension

arms back stretch

Pressdown

arms back stretch

One arm dumbbell extension one arm shoulder stretch

One arm dumbbell side raise

One arm shoulder stretch

Leg raise

Partial sit-up

One arm cable crunch

Diet Recommendations

Breakfast — Whole grain cereal

Lunch—Tuna salad with hard boiled egg

Dinner—Turkey soup

Abs, Thighs, Calves

Weight Reps Sets

Hanging Knee up

Partial situp

Seated twist

Leg Extension

1 leg back stretch

Leg Press

1 leg up stretch

Erect squat

1 leg back stretch

Leg curl

1 leg up stretch

Standing Calf Raise Calf stretch

Diet Recommendations

Breakfast—Soft boiled eggs with cheese

Lunch—Protein drink

Dinner—Ground turkey burgers and salad

Chest, Front delts, biceps, forearms, abs

Weight Reps Sets

70 degree Incline dumbbell press doorway stretch

30 degree incline barbell press doorway stretch

Dumbbell flyes doorway stretch

Dumbbell Pullover one arm shoulder stretch

Dumbbell front raise one arm shoulder stretch

Alternate dumbbell curl pronated arms back stretch

Dumbbell concentration curl pronated arms back stretch

Barbell Reverse curl pronated arms back stretch

Barbell wrist curl pronated arms back stretch

Hanging Knee up

Partial Sit-up

DAY 8
is a
REST day

Diet Recommendations

Breakfast—Multi grain cereal

Lunch—Cottage cheese, fruit and nuts

Dinner—Roast beef and salad

TORSO: chest, back, delts, abs

Weight Reps Sets

Doorway stretch

Front Pulldown

2 arm lat stretch

Cable Crossover Behind Neck

2 arm lat stretch

70 degree incline dumbbell Press

One arm shoulder stretch

Decline dumbbell fly

Doorway stretch

Low Cable Row

2 arm lat stretch

Bent over lateral raise

Rear deltoid stretch

DB Pullover

Super setted with Stiff Arm Pulldown

One arm shoulder stretch

1 Arm DB Row

One arm lat stretch

DB Side Raise

One arm shoulder stretch

Hanging Knee Up supersetted with

Partial situp

1 Arm Cable Crunch

Rowing

Diet Recommendations

Breakfast—Protein drink

Lunch — Tuna salad with hard boiled egg

Dinner — Roast chicken and vegetable

LEGS

Weight Reps Sets

Leg Raise

Crunches

Hanging knee up

1 Arm Cable crunch

Seated twist

Leg Curl

One leg up stretch

Hyperextension

One leg up stretch

Leg Extension

One leg back stretch

Leg Press

One leg up stretch

Erect Squat

One leg back stretch

Standing Calf Raise

 $Calf\ stretch$

Leg Press Calf Raise

Calf stretch

Seated Calf Raise

Calf stretch

Diet Recommendations

Breakfast—Scrambled eggs with cheese

Lunch—Tuna salad with hard boiled egg

Dinner—Ground Turkey burgers

ARMS

Weight Reps Sets

Close Grip Bench Press
Or Dip Machine super setted with
Dumbbell kickback

Arms back stretch

One arm Dumbbell Extension

One arm shoulder stretch

Alternate DB curl

Pronated arms back stretch

1 Arm DB concentration curl

Pronated arms back stretch

Face down Incline DB curl

Pronated arms back stretch

Rope Preacher Reverse curl Super setted with Barbell Wrist Cur Pronated arms back stretch Gripper

Leg Raise

Crunches

Hanging Knee Up

1 Arm Cable Crunch

Treadmill

Diet Recommendations

Breakfast — Soft boiled eggs with cheese

Lunch — High protein ice cream

Dinner — Grilled fish tacos with sautéed spinach and avocados

Taking Photos Rest on day 12 and 13 and

Then it's time to see your results from two weeks of hard training by taking photos. Take these shots and keep record of them best in a file on your computer. Take photos every month and review the evidence.

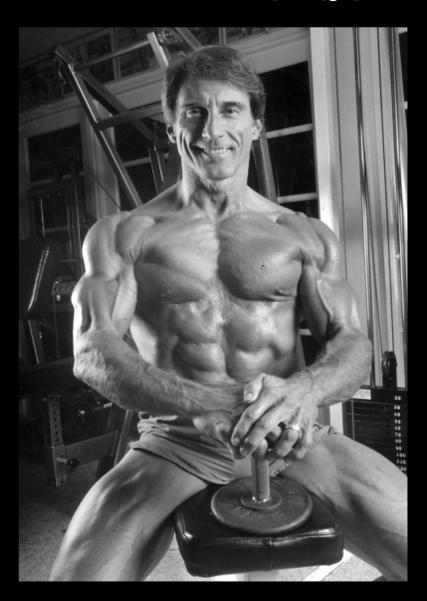
This has been a preview of the first two weeks of the 13 week program from 91 Day Peak Physique.



when you comlete the 91 Day Wonder Body program and want to bring your development to a maximum you need to upgrade to the 3 Way Split Routine to get your Peak Physique .

91 Day Peak Physique is a must for all physique competitors and all serious bodybuilders.

91 Day PEAK PHYSIQUE



FRANK ZANE

Horseshoe Triceps

Follow the pump is a rule I like to follow. So I work triceps right after chest. Dumbbell pullover is my last chest exercise and it not only hits my serratus and ribcage, it also pumps up my posterior triceps head. That's the long head at the rear of the triceps and when it's developed it adds a fuller look to the upper arm

Triceps are the bigger muscle group of the upper arm, bigger than biceps so if you want larger arms be sure to do enough triceps work in your arm program. I like three exercises for tris, they are:

Close grip bench press on a Smith Machine (as shown) or with a barbell. Pressdown on my lat machine and overhead dumbbell extension either with 2 arms (as shown) or one arm at a time as in the one arm dumbbell extension.



Close Grip Bench Press is the only bench pressing I do anymore, no need to keep doing regular grip BP—don't need bigger pecs. Close grip BP with slow negatives is a great size builder and it is the first movement in my triceps routine so I

go heaviest on this one. Three sets of 12, 10, and 8 reps are super setted with 3 sets of

Pressdown — this is an isolation movement following a compound mass movement (bench press) and I

keep doing reps and holding each one for a second at lockout to give me burn by the end of the set. The I do arms back stretch. tense my triceps a little and do two more super sets. My reps on



each set decrease for 12, 10, and 8 reps as my weights increase.

Sometimes instead of close BP I do **parallel dips** on my dip machine. It's great pec and front delt work at the same time and I'm sure to get a good lockout and to get more tension on the lockout I have a rubber ban

wrapped around the weight stack.





I might super set dumbbell kickbacks with dips or even with close grip BP for variety, keeping reps high on this one between 12 and 15 not going too heavy to get a good lockout. Wrapping up the triceps routine is

overhead

dumbbell extension with two



arms or with one arm. I make sure to let the dumbbell descend as low as possible on this movement because this is

how the posterior long head of the triceps develop. And while the 2 arm version is good for this, **one arm triceps extension** is even better because you can stretch lower and hit the long triceps head better. 3 sets of 12, 10, 8 reps on this one increasing weight on every set.



Elbows pointing out works the outer triceps while



bows pointing back works the long posterior head of the triceps and elbow midway between works both head of the triceps. Pick a good routine, train triceps twice a week get a pump on every set. I usually do several sets of



Huge triceps in 1972

one arm side cable raise right

after the DB extensions or super set the side raises with the DB extensions to bring out lateral delt/ triceps tie-in

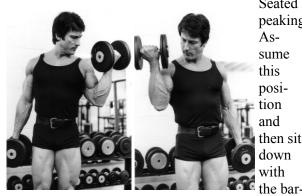


Peaking the Biceps

There are three sections to focus on when training biceps:

- Overall building entire biceps 1.
- Upper outer biceps
- 3. Peaking the biceps.

Category one necessitates a good full range movement that hits enire biceps and forearm as well.



alternate dumbbell curl.

As you curl each dumbbell, gradually start supinating the db (turning your wrist outward) right up until it gets to the shoulder. At that point supinate a little more, pause of a half second, and then slowly lower db pronating (turning it inward) until it stops at the side of your thigh. Then repeat with other dumbbell

Incline dumbbell curl is the best for

upper outer biceps when you do it by supinating the dumbbells as you raise them up to the poiit where the tension stops as show in the photo. At this point turn the dumbbells outward even more (supinate) and hold for one second before you slowly begin lowering them. The flatter the angle the more it stretches this area but the point where the tension falls off decreases.

Seated Barbell Curl is good for peaking the biceps.

Assume this position and then sit down with





arms will be bent. Then curl the bar up to the chin, hold for a second tensing the biceps and then lower slowly. The reason this movement is so good for peaking is due to the fact that the hands are in a supinated position at the top of the movement. You eliminate the supination which the hands would be in at the bottom of the curl if one were standing. This would be really hard on the inner elbow

The rule to follow for best biceps development is **keep your** wrist straight and supinate. What happens when you do not keep yor wrist straight but curl the weight with your wrist bent inward. I did this for the years prior to 1969 in my curling and it resulted in bigger more developed forearms but my biceps lacked peak. It wasn't until I got to California and began doing all my curls with wrist straight that I did develop a peak.

But no matter how you curl your biceps will be doing some of the work and this is why I always train forearms right after biceps work. It's a simple routine, often



super setted: Reverse curl with straight or EZ curl bar 3 sets 10 reps wrist curl with fat sleeved bar or Olympic bar 3sets 15 reps.





Gaining Weight Proportionally

If you are concerned about how you look then don't become obsessed with gaining weight quickly. Quality muscle takes time to develop and can't be fairly judged by what a scale reads. It's all about how you look and to learn this

and improve you need to take photos.

Look at these two double biceps shots, this one taken in 1965 weighing 210 pounds and the one on opposite page taken 14 years later in 1979 weighing 195. What happened during those 14 years (and you can see photos of this in my Symmetry book) is I trained for muscle shape and definition

So what enabled me to build my bodyweight up to 210 in the above photo? I built big thighs (over 27 inch-

es) by doing heavy squats. I was doing 3 sets of 10 reps with 300 pounds in squats when I was 18 and eventually did 10 reps with 405. Built big thighs and a thick lower back but it also made my waist bigger.

As you descend in the squat to the low position your stomach is forced outward and over time as

heavy squatting continues the gut gets bigger. Also holding a heavy barbell on your shoulders causes a slight side to side bending as you go up and down and the obliques grow too.

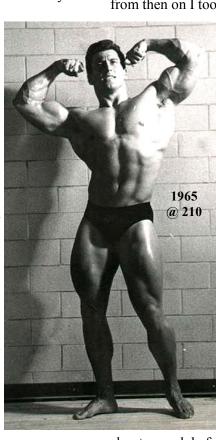
At the time (1965 I was teaching school in cold New Jersey and wasn't into taking photos. Photos didn't begin until the late 1960s and from then on I took lots of them. As a

result I have thousands of good images collected over a 40 year period. It's interesting to compare the same pose from different eras as I'm doing in this article. You can see that in the 1979 image there is much more muscular development and definition because that's what I deliberately worked for in my training and eating. My upper body and calves are bigger & my thighs are smaller but way more defined.

The opposite pose was taken

about a week before the 79 Olympia. I did no squats in the 6 weeks preceding the competition but did do heavy leg extensions working up to 10 reps with 275 on my trusty Nautilus machine. At night I ran 1.5 miles @ 8 miles per hour and my legs became very defined from this.

All the ab work prior to the



show gave me deeper defined upper quads as well as lower ab development. My favorite aside from hanging knee ups was pulley knee in lying on the floor of my gym with ankle straps attached to a low pulley. I'd lie there until I completed a total of 100 reps pulling the attached weight into my chest, did something like 30 pounds 30 reps, rest, 40 pounds 25

reps, 50 pounds 20 reps, 60 pounds 15 reps, 70 pounds 10 reps. Using weight on lower ab exercise gives abs and upper quads a chiseled look.

I did no weighed work for upper abs (except for 2 arm cable crunches), nothing like Roman chair situp or incline situp holding a weight. This builds the upper row of abs which attaches to the ribcage. Build upper abs and your waist may protrude. You might never

be able to do the stomach vacuum!

Every year in winter season after I've reached my peak for the year I take a look at my overall development and ask myself what needs to improve. The answer to this question has changed over time. Years ago it

was more upper body and calf development, less thigh size with more definition and leg biceps. Today my goal in this maintenance season is to keep definition and ab development and not bulk up.

So if you bulk up and gain weight rapidly it the bulk will go to the wrong places. It will navigate and dwell in the central areas of your

> body: waist, butt, thighs, pecs. In other words when you bulk up you gain weight by building central mass. But this doesn't create a more proportionate look to the body. The way to build this esthetic look is to build the peripheral muscle groups, i.e. calves, forearms deltoids, and develop a small muscular waist-

develop a small muscular waist-line.

There is no rush to build a symmetrical proportionate

body. Take your time, do a good job based on feedback from photos and enjoy your training. Remember it's not about numbers. The scale and tape measure don't translate into visual impressiveness.



Which Look do You Prefer?

As the saying goes, 'There is no accounting for taste'. What you like is what you like, you don't have to explain or justify it. So

what about growing? How does a body turn into the bulked morphed photo on the left as shown on the opposite page?

Notice that there is difference in the size of the thighs, hips, waist, pecs, traps, and neck. I couldn't weigh the image in the photo but it must be a good 20 pounds heavier than my 200 pound bodyweight at the right. It's because I've increased the size of the biggest muscle groups. The size of the deltoids, biceps, triceps, forearms, remain

the same. These smaller bodyparts are normal in the right image along with the bigger parts. The small parts don't weigh much but their size and development enhances the balanced 'symmetrical/ proportionate' look of the body.

The question is what do you want to look like? You can gain size and bodyweight rather quickly

by working the big body parts heavy. Or you can take your time and sculpt your body, not focusing on how much you weigh or how big you are, and be more concerned about a more aesthetic look. So if you want the bulked look on the left be sure to include these exercises in your training: Squats are especially important, lots of squats will increase the



mass of the ass, thighs, and grow the waist thicker. The waist is pushed outward when squatting with heavy weight on shoulders. The lower back spinal erector muscles also thicken from the forward bending in heavy squatting. But it's how you grow, in my case I grew up to my thighs, they were over 27 inches in 1965 from doing 3 sets of 20 reps with 325 pounds. Years

later when I won Mr.
Olympia I'd say my thighs were a good 2 inches smaller, but my upper body was bigger and more developed (as seen in the right hand photo on opposite page).

The other power lifts bench press and deadlift figure into the bulked look along with squats. Bench press works the pecs, front delts, triceps, deadlifts work the entire back, traps, and neck but not very much lat work is involved in deadlifting

unless you do wide overhand grip deadlift from knees up. Two other

exercises that build massive traps and neck are shrugs and upright row.

Avoid heavy side bends in your ab workouts. Also best not to do weighted situps because the upper abs which are attached to the ribcage. Thick upper abs may

cause the waist to protrude out beyond the pecs. Heavy squatting also thickens the waist by the slight side bending that occurs when a heavy weight is on the shoulders. Study the photos below and you will notice that I look wider in the normal photo at the right. Thicker waist, pecs, traps, neck, and thighs create an illusion of narrowness due to thickness. I'd rather be wide than thick How about you? You



can have what you want if you train for it correctly.

Choose your Look

I always suggest that clients take the initial set of photos and don't get them developed until they take another set one month later.

That way there's something to compare, which is the whole point of taking the photos in the first place. People are rarely pleased with the first set, so take my advice, wait, train hard for a month, and then see what gains you've made. It's important to duplicate the photographic conditions as closely as possible each photo session: same film. time of day, same poses (standing relaxed front,

ry poses, or whatever poses you like, just do the same ones each time). Photos will enable you to see yourself as others see you. This is important. Study the photos and

pick out your weak points. Give these areas priority in your workouts by training them first in your sessions or on a separate day. If you need to lose fat, and most people do, work on dropping 5 pounds a month until you get to your best weight. It's not about how much weight you lose, but how you look, so let the photos be the judges. Dropping body fat is the first step before you can develop lean muscle mass that looks impressive. Gaining 5 pounds of muscle per YEAR is a reasonable goal. This is a lot of



back, and side, and the 7 compulso-muscle. You'd look totally differ-

The photo above has been morphed to illustrate the effects of growing big muscle groups. On the left the thighs, waist, traps, and pecs have been made larger, which would probably result in a weight gain of a good 20 pounds. On the right the delts, lats, triceps, forearms and calf have grown resulting in a few pounds bodyweight gain. Which look do you prefer?

ent. So forget about gaining a lot of on your hormonal balance. weight in short periods of time. If you do it's not going to be solid muscle.

It's challenging to get this

concept across especially to younger bodybuilders who want to get bigger yesterday. If you take photos on a regular basis you will be able to see how your body is growing over time and from this you can learn how to adjust your growth. It's always best to take your time. Photos can tell you what you need to pay attention to in order to develop a complete body. Bodybuilding is a lifetime activity and you should grow as

you mature not only in physical ways but mentally and emotionally as well. This is how the bodybuilding spirit grows, as a dedication to lifelong bodybuilding.

How much muscle you develop depends upon how you train, eat, and recuperate. It also depends up-

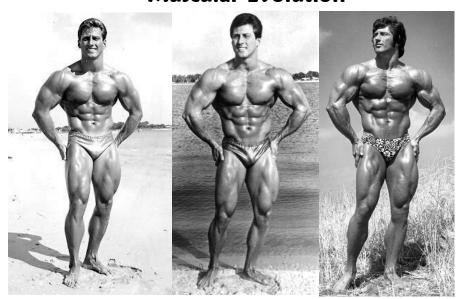
Your natural hormones slow down as you age, and I think for most healthy men in their 40s the levels are still adequate to build

> muscle. But as you get older and into your 50s, 60s, and beyond, this likelihood diminishes. Levels of thyroid, testosterone, growth hormone, DHEA, melatonin become a fraction of what they were at a younger age. The big difference I notice in my workouts in my 70s compared to when I was younger is that it takes longer to recuperate. Shortening my workout by doing fewer sets with greater intensity slower negatives and lighter weights has helped me to continue produc-

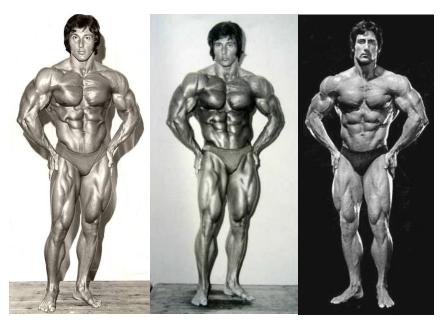
tive training in spite of the hormonal slow down. Also boosting my nutrient density with amino acids and the natural hormone boosting substances described in later pages along with recuperation and energy conservations techniques me to continue to grow.

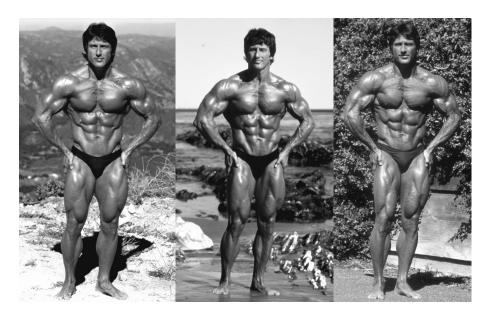


Muscular Evolution



"Now hit your most muscular shot" Joe Weider suggested as the photo session progressed. So I hit the traditional crab pose. "No, no," was Joe's response. "Try putting your hands on your hips to emphasize your width and give a good look at your abdominal development". Thus my most muscular pose was born. Here's how it looked in 1966, 68, 70 (top), 71, 72, 76 (bottom).





Here's how it looked in 1977, 78, 79 (top), 80, 82, and 1983 (bottom). Notice how my thigh girth increased then decreased and grew more muscular while my calves continue to grow. Now at age 76 I don't need to do much calf work and keep my thigh mass up by squatting once a week with the Leg Blaster and leg press with moderate weights.

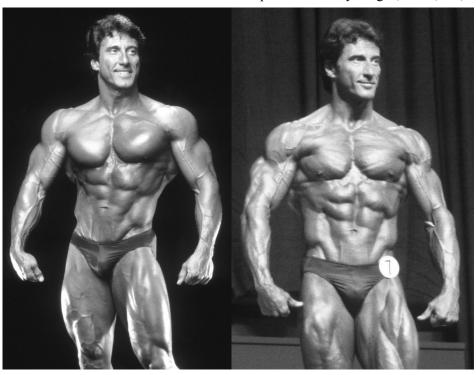


Difference a year makes!

Weighing 200 pounds on stage for 1982 Mr. Olympia I was bigger than ever before for competition. As I looked at all thephots afterwards I realize that actually I was too big. Everything was bigger all of upper body including waist, calves but not thighs. If I had trained thighs heavy for this

trained very heavy that year I was not plagued by any injuries. Maybe it was the slow negatives I learned from powerlifters. But I liked the way I looked at a lighter bodyweight better.

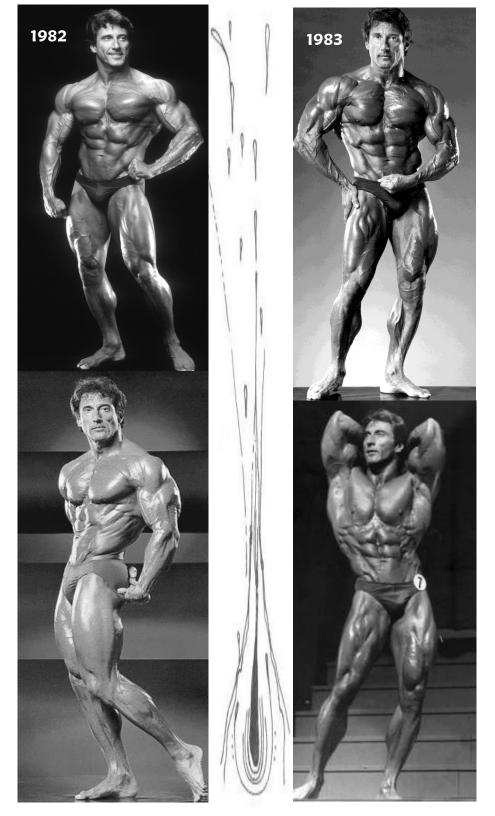
From that experience I learned that when you gain weight in a non gradual way like in bulking up most of the extra bodyweight lands on the central part of the body: thighs, waist, ass,



contest I would have weighed even more, But taking others advice rather than relying on my own instrincts and preferences, I wanted to be as possible for competing. What happened was that I did not show the fine detail and deep striations I'd whown in 1976 and 1979 but I was bigger. And stronger doing 5 reps with 555 in deadlift from knees up, and 300 pounds incline bench press with a 10 second negative. Strangely enough even thought I

pecs, back and not enough on peripheral muscles like calves, delts, biceps, triceps, forearms. Bulking up fosters a blocky look. It was against everything I believed in and wanted for my own development.

So in my final year of competitive training I went all out for definition and ended up competing more than 15 pounds lighter, smaller but way more definition. Check out the photos.



Blowing Zen: the Shakuhachi

It was more than 40 years ago I visited Japan. I still remember leaving the temple encountering an old Japanese man in a robe. He was playing a flute-like instru-



ment that sang a sound I've never forgotten. The man spoke English, so I asked him, "Are you Buddhist?" "Is a cloud a member of the sky?" he replied. "Do you

meditate?" I queried, after spending two days just sitting, I felt on the verge of enlightenment. "He said, "I play shakuhachi."

The sound embedded into my memory and it replayed throughout the rest of my tour and on the plane trip home. But since I wasn't interested in music at the time, except for listening to Led Zeppelin and Pink Floyd, the experience stored away in my memory. It wasn't until this year that I connected with it again after watching the movie *Kill Bill* which contained music I recognized as the shakuhachi.

Searching the Internet for more information, I learned the Zen flute is possibly the simplest non-percussive instrument ever conceived. It has no keys or pads like a western flute, no reed like a clarinet or saxophone, no strings like a guitar or violin, no mechanisms inside like a piano or organ; it doesn't even have a mouthpiece like the recorder. It simply has five finger holes - fewer than the penny whistle or almost any other wind instrument - and

one end cut to form an angled blowing edge. Despite this simple construction, the Zen flute (in the hands of a master musician) can produce an inconceivably broad range of musical sounds - from pure, flute -like notes, to tones that are every bit as complex and expressive as the human voice. Being able to produce such complex and expressive music - as haunting and as enchanting as you will ever hear - from an instrument so basic, is a paradox of the shakuhachi

The Zen flute came to Japan from China some time in the 8th century. At that time, the shakuhachi was constructed from the middle section of a bamboo culm. Around the 15th century in Japan, the instrument was adopted by a sect of Zen Buddhist monks - all of whom were samurai - as a tool of meditation. They knew that the playing of it relaxed both mind and body, aiding their spiritual pursuits.

It was during this period that the Zen flute began to be constructed from the

spiked root section of the bamboo - as it is today - so this instrument of peace and tranquility doubled as a particularly ferocious weapon for samurai monks. This probably explains the Zen flute's long



association with the martial arts.

Unlike other instruments, there are no child prodigies in the shakuhachi tradition. Not one. This is understandable, since the instrument is not only immensely difficult to excite, but also takes many years of dedicated training to attain a standard where you would perform.

The Zen flute is not like a recorder: it has no mouthpiece as such, and simply blowing in one end will not produce a sound. To play a note, your lips and mouth must become part of the instrument (how appropriate for an instrument known as the Zen flute!). And it is this "oneness" of instrument and player that permits so much flexibility in pitch, tone, color, and loudness of playing.

Part of the discipline of mastering the Zen flute is learning to deal with the frustrations inherent in learning to play it. That is why much of its study is dedicated to "forging the mind-body" - developing the intuitive, spiritual side of the performer as much as the musicianship itself. Playing the shakuhachi in this context is

called suizen, or "blowing Zen". To blow Zen, one requires great breath control; yet, after years of training and practice, the shakuhachi player strives not to try to control the breath at

all. Instead the breath is observed. The player "watches" the breath with a concentration that consumes both the observer and that which is being observed - the player "becomes" the breathing.

Today shakuhachi music is appearing to those hemmed in by their material world. There is a renewed interest in playing shakuhachi where body, mind, and spirit are developed along with musical ability.

Ro is the first note on a shakuhachi, with all finger holes closed. Blowing ro is the starting point of shak playing since it prepares the embouchure for the demands of the music to be undertaken. Breathing is mostly through the nose while relaxing the body and pushing the air down into the diaphragm. By developing a good ro through daily practice one acquires many good techniques. It has been said that by blowing ro for ten minutes a day one can become a shakuhachi master. I became intrigued with this idea.

Since I began making and playing bamboo flutes as a hobby, I'd seen shakuhachis on E Bay, but thought they'd be too difficult to play. Quite expensive too, a good bamboo shak costs hundreds even thousands of dollars and my wife certainly wouldn't let me spend this kind of money on a flute. Finally I decided to get an in-

expensive shak made from PVC. It proved challenging to get a sound out of it. Since I had a bunch of thick bamboo left over from the side blown flutes I'd made, I figured I'd make a few shaks.

I made about a dozen of them before I found some root end bamboo and here's a picture of my latest masterpiece.

It's very satisfying for me to make these flutes. I become thoroughly grounded in present time and forget about everything else. Playing them is even more fun. I make it a point to "blow ro" for ten minutes a day as part of my meditative practice. My playing keeps improving, creating the sound with control of the breath. One must be totally relaxed to play this instrument. The sound produced helps get you there



Fernandez Contest Transformation

All things are possible if you just believe! Belief also has to be backed up with action which is what has taken place in my story. My journey started in San Diego California one Sunday evening after church when I ran into Body Building Legend Mr. Olympia, Frank Zane. Though brief conversation this led to an opportunity to train and learn more about the sport that has driven me since I was 14years old. I was so excited the

have the opportunity to work out with Mr. Olympia that I did not sleep the night before, not recommended for anyone getting ready for a great workout but for me it would just have to do and it sure did. We had a great work out which led to many more and led me to seriously get myself together from the inside out, what I mean, well from my hearts desire to workout and compete in Body Building once again after 28 years it is going to take a lot and you know what. Frank Zane was just that person to wake that animal in me to train and diet hard enough to step in

stage once again. Well my dream to be a body builder, not just a weight lifter was becoming real as months passed by. Now in conjunction with my positive attitude in every are of my life and believing that all things are possible, I now am acquiring knowledge in areas I had no Idea could make such a tremendous difference on how I look, training techniques, form, diet, nutrition, posing, and mental attitude. These are some of the most important factors that are required to build your body to become a body builder.

It is like Frank tells me "You

can't try and train really hard and do it all at once, trying to make up for lost time. It is a process, take your time and do it right, avoid injuries, it is not just training at the gym that is going to get you into contest shape. It is many variables that come together to complete the process, nutrition, diet, training, posing, shaping, exercise, mental attitude, and rest. You did not get out of shape in a few months, so don't try to get into shape in a few months, take your time, enjoy it and do it right."

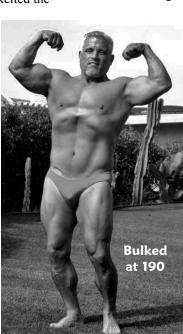
Through following Frank Zane's

leadership I have seen size and definition that I did not even have in my twenties when I was competing. To be exact I have never seen definition such as this in my body so this is very exciting. Training for the Border States Body Building contest took quite some time. Training took about a year. Starting at 220 pounds to 160 contest weight was not a walk in the park, but a well worth journey.

Training consisted of a 6 day on 1 day off. Diet consisted of high protein low

carbs. Training alone was not going to do it for me. I needed to diet really hard to get considerable results because I have been heavy for quite some time. As time and training continued my body was reacting well to Frank Zane's training. There came a point where I got stuck at 180 pounds and I knew I had to do something different, something drastic to shock my system. My body was now use to what I was doing.

Through conversation I heard Frank say, "I won Mr. Olympia because I



was willing to do what nobody else was willing to do." That stayed with me and I applied that principle. I started dieting really hard cutting what was not necessary, basically very low carbs and more protein. Training stayed the same intense, and diet took over, mental attitude changed and it just did not matter I ate what I was use to; I ate what was necessary to grow and get cut for the contest. Dieting harder did the job, it really worked. "You are what you eat." In another week and a half I lost another 5 pounds

and abs started looking sharp, definition was now obvious. WOW!

"I'm looking like a body builder." This fired me up even more so I kept dieting harder. Now I had a different outlook on how I should look at food and how I should eat. I kept this mental attitude going and results now were coming in faster and training got even more intense now training same body part two days in a row with one day rest beingSunday. Training like this allowed me to concentrate on each body part

two full days with a lot of detail, attention on form, technique and quality. Training changed once again two weeks before the contest.

Diet was working great, I was now 170 pounds and looking better definitely more defined. I am getting better results by following exactly what Frank Zane tells me. Timing is everything and so is everything you are putting in your body. The hardness in the muscle is very visible now something I have never seen in my body. I have seen it on other body builders

but not on my body. Now I am experiencing a transformation, making a switch from just training for size to sculpting the body to a work of art, piece by piece one workout at a time, one day at a time, taking my time to build it right. Rome was not built in one day and I did not gain all this weight all at once it took time. So it is going to take time to get it in shape. I get it now.

What an accomplishment training and dieting for a contest and when it is all over I accomplished goal and dreams I

have had for years. It has been 28 years since my last contest which was the Border State Body Building show. I placed 6th which is guite and accomplishment considering the voyage taken from 220 pounds a year ago. I could not have done this if it was not for Frank Zane's guidance, training, and advice. I have been training for years but never to the level that I now encounter with Frank training techniques in building and shaping. I never knew what a difference was. I just thought ok, you workout= you grow ok. Now you train and eat=how you grow and shape your body. Grow-

ing with out shape= The results I now see are something I have always wanted to get, but did not know exactly how to go about it and now with guidance from Mr. Olympia, it is happening. Frank paid his dues; he is living proof and a fine example of what you can look like if you just follow instructions just listen to what is being said, and written in his book and in his quarterly magazine. That is just what I am doing,

Prayer with out action is useless!



Lucid Dream Healing

Ed Kellogg earned his Ph.D. in biochemistry from Duke University for work investigating the role of free radicals and singlet oxygen in the aging process. He has published numerous papers on his work in fields as diverse as the biochemistry of aging, bioelectricity, general semantics, lucid dreaming, voluntary controls, and the phenomenology of consciousness. A proficient lucid dreamer himself, Ed has studied lucid dreaming and its applications for over 20 years from the "inside-out", and has a long-standing interest in the phenomenology of dreaming. Ed has experienced hundreds of fully lucid dreams and has recorded and indexed over 15,000 of his dreams. He directs the Phenomenological Laboratory in Ashland, Oregon.

He teaches practical methods for bringing full waking consciousness into ones dreams, for controlling dream reality, and in exploring the outer limits of lucid dreaming. He has presented numer-

ous papers and workshops on topics such as the lucidity continuum, lucid dream healing, lucid dream incubation, lucid mutual dreaming, out-of-body experiences, and the use of magic in lucid dream reality.

In respect to his own work, Ed writes: " I take a phenomenological approach to dreaming, in which I try to explore and to describe dreaming experience with a minimum of presuppositions as to its nature. This can prove far more difficult and complicated than many might imagine! The Association for Study of Dreams (ASD) website has the most easily accessible material of my work, through the various papers and abstracts I've posted on ASD's Paranormal Phenomena Forum (www.asdreams.org/telepathy/).

Healing of Self

In 1989 I reported on the dramatic improvement of a severely infected tonsil following my own lucid dream healing experience. Although others had reported using lucid dreaming as an effective psychotherapeutic tool, to my knowledge at that time no one had previously reported using it as a possible means of inducing physical healing directly. Since then I have used lucid dream healing successfully on pain, infections, inflammation, and even to promote the reduction of scar tissue. Others have also experienced positive outcomes following LDHEs (lucid dream healing experiences) as applied to a variety of conditions, ranging from the overnight disappearance of painful inflammation due to chronic bursitis, to the overnight elimi-

nation of a herpes sore, to the elimination of a chronic case of bronchitis.

Healing of Others

Far more astonishing than the healing of a lucid dreamer's own physical body, which one can plausibly explain through a psychosomatic model, on a few

occasions lucid dreamers have observed physical improvements in *other* individuals following the healing of that person's *counterpart* in a lucid dream. Such reports lend credence to the idea that dream reality can have a consensual and inter-subjective basis, an idea that the phenomenon of mutual dreaming (where two or more individuals have similar dreams about each other at the same time) also supports. Double-blind controlled studies demonstrating effects of other kinds of distant healing, such as prayer, also provide support for the possibility of a distant healing effect.

Potential for Healing

The limits of lucid dream healing remain undetermined, but the remarkable body changes documented in multiple personality cases and in deep hypnosis may apply, as in each instance mental changes

can apparently lead to substantial physiological changes in a matter of minutes. Although sharing the same body, different personalities often have different allergies, accelerated healing rates, and eyeglass prescriptions. Dr. Bennett Braun reported on the case of one woman who has diabetes in one personality but not in another. Dramatic changes can take place within minutes, and point to the amazing and accelerated healing effects potentially available to all of us, through mental changes-of-state leading to physiological changes-of-state in other modalities. In the future, controlled studies may eventually confirm

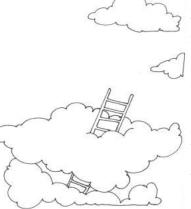
the effects seen in these anecdotal reports, and lucid dream healing may become one of the more accepted and practical applications of lucid dream research. But for the present, we will just have to let the dreams speak for themselves.

The dream body can give very useful feedback as to how people really think of themselves, of the "bottom line" mental image that they have of

themselves, rather than the superficial image they consciously think they have. By developing the dream body a bodybuilder can emphasize the importance of having a clear and positive mental image of the body that they wish to create. Although the dream body image can change from dream to dream, or even during the course of a dream, in my experience over time it gives good feedback on how people really see themselves. Once they get this information, they can act on it. For example someone who has a less than optimal dream body might spend more time doing visualization work, or use the information to help create a more effective visualization. They might even use the information, as you have, to design more effective training programs.

Lucid Dream Mirror Task

When you next gain lucidity in a lucid dream (where you know that you dream while you dream) find a mirror (or any other reflective surface, like a pool or calm lake or body of water, or a polished metal surface) and look for your reflection in it. You may look like your physical reality self, or ... you may not. Also, you might request that the mirror show you your state of health, using a chant like. "Mirror, mirror that I see, / Show my state of health to me!". Record your experiences in your dream journal afterwards in as much detail as possible.



Of course, the dream mirror can also bring to light information on developing or incipient disease states, as do prodromal dreams, that foreshadow illness. In my own experience, prodromal dreams, when listened to and acted on early enough, warn of what will happen if ..., and often even give advice of what to do to prevent the dream from

turning into the reality.

Unfortunately, many people don't pay much attention to their dreams, so rather than remembering and acting on a dream of this kind months or even years in advance - when the dreamer has plenty of time to do something about it, they may only pay attention to prodromal information much later after a nightmare, when a possible scenario has become an almost certain catastrophe.

And on the positive side, my dreams and it seems yours as well - often offer useful and practical advice about diet, exercise, and even specific supplements to take or practices to take up, not just to 'prevent disease', but to optimize health

Bodybuilding Psychology

Notice the subtitle does not read 'the' psychology of bodybuilding. It's 'a' psychology because it's my version based on practice, study and observation of the phenomenon of mind

The simple dictionary definition of psychology is the study of the mind and behavior. Breaking it down further psychology includes studying sensation, perception, consciousness, memory, emotion, cognition, and life span. Different versions of psychology are possible depending upon the experiences of the person writing about it. So here is what I've discovered and

practice. It's logical to call it Zane Mind

So we start by asking the question 'What is the Mind?' There is no one answer to this. I come up with: an invisible

container where an uninterrupted flow of thoughts arise and then disappear. It bears looking at the mind, observing yourself thinking. When you do you'll discover that the flow of sounds, images, and random associations never ceases. We are constantly talking to ourselves when we're not speaking to others. This is called self talk or internal dialog and it is ongoing.

It's good to take a break from this random cacophony of sounds and plethora of images and this is where meditation and training the mind comes in. This book is about how to improve focus and gain better control over your thoughts because thinking influences behavior. Action follow

thought, intention precedes movement.

This book investigates the mind offering parables that trigger a deeper meaning hard to express in conventional language. What's been valuable for me is investigating the different areas of psychology and relating how it applies to bodybuilding. My own training for the last 60 years as well as that of my peers whose backgrounds I'm familiar with. My intention is to provide helpful information and an understanding of the deepest motivators of the human behavior known as bodybuilding. constantly talking to ourselves when we're not speaking to others. This is

called self talk or internal dialog and it

is ongoing.

It's good to take a break from this random cacophony of sounds and plethora of images and this is where meditation and training the mind comes in. This book

is about how to improve focus and gain better control over your thoughts because thinking influences behavior. Action follow thought, intention precedes movement.

This book investigates the mind offering parables that trigger a deeper meaning hard to express in conventional language. What's been valuable for me is investigating the different areas of psychology and relating how it applies to bodybuilding. My own training for the last 60 years as well as that of my peers whose backgrounds I'm familiar with. My intention is to provide helpful information and an understanding of the deepest motivators of the human behavior known as bodybuilding.

The Four Forces in Psychology

are Behaviorism, Psychoanalytic, Humanistic, and Transpersonal.

Bodybuilding has roots in each force or school. There are adherents to each force who stay with it and then there are those who move through each school in their process of growth as a bodybuilder. Here growth implies a process of maturation including physical growth as well as beyond it.

Psychology is the study of the mind and behavior. The first force of psychology is concerned only with behavior, not so much with the mind. Behavior is objective and can be measured, everything else psychologists talk about is a 'construct' This includes that which cannot be measured like 'ego', 'personality', and 'potential'. Observable behavior, that's it, a mechanical system that includes the laws of learning by a process called conditioning, a mechanical emphasis on how life works. Behaviorism is stimulus/ response psychology, it's how animals are trained and it works. It works with people too but in my mind there's more to a psychology that mechanics (unless it's quantum mechanics which will be explained later).

Bodybuilding belongs where?

The second force of psychology delves into the mind more than behaviorism. There is the concept of the unconscious mind and constructs like id, ego, and superego to explain personality, motivation and behavior. I began relating to it more as I began to study psychology in college, examining my past. I was very introverted as a kid—rather shy. Bodybuilding made me feel better about myself. I tried

team sports in high school, but I didn't like that because I felt I could do much better on my own than I could with other people. My shyness was definitely something I had to overcome. I was rather uncomfortable in one-to-one relationships with people, but in front of assemblies I had no problem. For example, I felt awkward about going to parties and making conversation with people about meaningless topics. I felt like I was always watching myself, not doing the right thing. But when I got on stage, I felt different and special. I felt gifted—like I was good at it. It turned out I was. When I entered my first contest, I was 18. I'd been training about four years. I placed fifth out of 45.

Right after I moved to California in 1969, my father died. I started to question the meaning of life. I went through a rather traumatic period because I really never got to know my father. I respected him but he wasn't really giving with his feelings. He motivated me but never talked to me very much, so the motivation was basically negative-oriented. I did a lot of things unconsciously to please him. Bodybuilding was one of them, even though he objected to it. He would brag about me to his friends but never would give me a compliment or say anything good to me—or say anything to me at all which made me feel there was something wrong with me.

From my perspective now as a mature person with psychological training, I feel that my initial reason for getting into bodybuilding—trying to please my father—may true of body builders in general. It certainly is true in some cases, at least those I've observed. I think many bodybuilders,

both male and female, have a father complex, and it seems like the greater the bodybuilder—the better he or she becomes at it—the bigger the complex. Freud talks about something he calls object loss identification. If a person is missing in your life, either physically or emotionally, you take on the person's characteristics to bring them into your life. I think that's what I did. My father wasn't there for me emotionally, so I did things to make me more of a man—in other words, develop my muscles. I remember my mother telling me about my father when he was younger—what a great physique he had. He never worked out. He was just natural. Of course, when I knew him he was never like that. But the ideals and discipline he inspired in me brought me through some tough times and I appreciate him all the more for that. And certainly any negative effect on me due to his emotional absence was offset by the ideals he inspired in me, particularly his interest in sciences, mathematics, business and just plain living an honest life. So at this point in my life I feel closer than ever to my father.

I've known a lot of bodybuilders, including many world class ones. They have strong mother figures but the father is absent either physically or emotionally or they were objected to by the father.

This can also apply to women bodybuilders. I was very shocked when I first found out about women's bodybuilding and true hard core women's bodybuilding contests because, for me, bodybuilding was a way to become more manly. Now here were women doing it. I wondered: What gives here? I couldn't figure out why women wanted to become more of a man.

Turns out it's for the same reason: because they have a weak father image or none. In women, it is the animus, according to Carl Jung. This male archetype needs to be built, needs to be resurrected. With men, of course, they're men already and they have their self-concept which basically is formulated from the first man in your life, your father. If that relationship is lacking, you're going to find ways to fulfill it, to make it more complete. That's what bodybuilding was for me. I think that was my deepest motivation. Although bodybuilding has the potential to become your own personal growth psychology, you don't start out that way As I see it there are two categories of bodybuilding. One is body building as character armor; the other is bodybuilding as character completion.

Character armor is why people start working out as bodybuilders—to develop their ego, to become more self confident, to develop their self-image, their self-concept. The basic idea is that you as a separate entity want to become stronger because the world seems threatening to your still-forming, malleable ego. So each layer of muscle you add is like putting on an extra suit of armor. It shields you from the outside forces. It's a defense mechanism. In bodybuilding, there are many metaphors of aggression tied up with body parts. For example, when going to war, you "bear arms." Anatomically, you bare your arms for combat. Bodybuilders refer to arms as "guns." Nineteeninch biceps are a nineteen-inch set of guns. And an extremely hard workout is described as "bombing" your muscles and "blitzing" them.

He's going into life as if he's going into combat. The world is a war

zone, a battleground—all that stuff. Basically you build up muscles, you shield yourself from your true feelings. You're not ready to get in touch with your feelings, so you separate from them by muscle. You build up a thick wall of muscle and don't get in touch with the deepest level of yourself. I think of the Bioenergetics² approach where you have a core which is your true self, your true emotions, love, connection to the universe—whatever you want to call it. The first thing that separates the core from everything else is the muscular layer. It surrounds it; it holds it in. That's what happens in bodybuilding. People use it to armor themselves. They build themselves up and in the process they become further

removed from their true self. That's all part of the ego-building, body-building process.

Bodybuilding in its latter stage, especially when one gets older, tends to go in the direction of personal growth psychology. And that's what I call transpersonal bodybuilding.

When somebody becomes involved in bodybuilding, especially in a more competitive sense, there are very few thoughts about the kinds of goals involved in transpersonal disciplines. But as you go along and get better, you realize that muscle alone isn't going to fulfill you. That realization reaches its climax at the height of competition. When somebody is competing in bodybuilding, like I was, and goes as far as they feel they have the potential to go and then retires, at that point their

whole perspective turns around and these other issues, transpersonal issues, become more prominent. So I think that bodybuilding is character armor; it reaches its climax right before one retires from competition. And then when the bodybuilder does that, the transpersonal issues become more in focus. It's sort of like the death-and-rebirth process.

Competition is inherently an ego-motivated discipline. When you reach the peak of success within that framework and find that the traditional rewards simply aren't satisfying, you wonder where you go from there.

Bodybuilding As Character Armor

Training to Failure is not wise. Failure is punishment and can lead to injury and more armoring. It may invite learned helplessness when you constantly associate the seeming

necessity to fail in order to succeed. Punishment is a way to extinguish productive behaviors

True success is about positive expectation. And positive expectation transcends failure. Failure can lead to learned helplessness if you conceive it the wrong way. Let's consider working out and doing each set to failure. Many believe this is the only way to grow and the best way to train. But anyone who's been training a long time and has been successful at it will tell you they don't go to failure with each set. Putting out until ya can't do it anymore trial after trial leaves one

with the feeling that he must fail to go forward. Obviously one cannot keep going up and up with poundages leading to failure, strength gains don't keep going up unless you're drugging it up, so one tends to do less to fail. It happens on an unconscious level and you think "I'm going to failure but not making gains". And soon an injury occurs and now you have really failed. Decreasing gains and injury present an attitude of 'nothing I do matters, I can't make gains, I've failed at failure'

Telling yourself this pessimistic mantra over time brings about a negative life situation. If this negative self talk keys in when you do not succeed at something and get frustrated it will lead to depression. Pessimism leads to depression according to Martin Seligman³. Successful outcomes rely on optimism and Seligman says it can be learned.

He says that even more important than positive affirmation that you many repeat to yourself are the negative things you say to yourself when you don't succeed. Self deprecating remarks like 'damn it, I missed it' when one fails on the last rep in a set can lead to being permanently unhappy with yourself.

Failure ——Pessimism——Depression is the downward spiral triad.

It's important to experience success in what you do. This doesn't mean you can't fail. When you do simply consider it a learning experience, you've learned what doesn't work, you've learned what not to do. It's how you think about it that matters. Not achieving success on an attempt doesn't mean it won't happen if

you keep going after it. Losing a competition means you still get to keep the same goal and game plan.

It's called perseverance and for some reason I have a lot of it. Everything I'm good at is a result of doing it for a long long time.

Some things you can keep getting better at like music, but with others like bodybuilding the results diminish with age. This is something everyone has to live with, loss of muscle and energy with age. The idea is to minimize this and do the best you can. Plug up energy leaks. Do what makes you feel better about yourself. Imagine yourself younger like in the Counterclockwise⁴ experiment. Say positive things, be more optimistic.

When faced with an obstacle: Does it make you want to give up? Does it make you want to train harder?

Does it have no effect on you?

Ask yourself next time you're challenged. "Does this make me want to give up or want to do better." If the obstacle has no effect on you it's the best scenario. This means it can't make you do anything. You have the power.

Fact of the matter is we do not know what is impossible so why not find out? Don't say negative things to yourself or out loud, and keep an open mind as to what you'd like to achieve. Just because you haven't done it or even if no else has ever achieved it doesn't mean you can't do it. Give it a shot and have a backup plan so you can keep going for it. If you want it maybe you can get it. Life is about finding out and learning from experience. Find out why everything works if you let it.

Bodybuilding as Character Completion

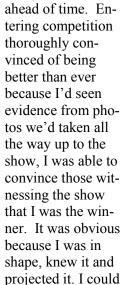
Is a process that began for me after retiring from competition. After doing this for 23 years I was suddenly faced with a different reason to continue training and I had to figure out just exactly what that was. Before I had a contest to train for every year and nothing motivates you more that realizing you will be getting on stage showing body to thousands so better be in shape.

Give them a reason to cheer and applaud.

Preparing for the 1979
Olympia the last month I retired to a house we had in Palm
Springs that I'd turned into a gym. I trained, meditated, sunbathed, napped, ate, ran and focused on noth-

ing but training and winning. I discovered soon after I began this isolation that if I just let my mind wander I'd inevitable start thinking about the competitors, "What if so and so looks like this?" and on and on it went. Then I realized that how anyone else looked had nothing to do with me and thinking about it just caused undue concern and stress better avoided. The answer was to say my mantra continuously, something I still do from during the day and especially during my long morning meditations. A week before the contest I began

experiencing incredible bliss and calm and I knew what I was doing was paying off so I intensified my practice. I'd go to sleep at night saying my mantra and waking up saying it in the morning. Even now I do this and if I'm not saying as I awaken I start saying it a few seconds later. It crowds out any doubts and negative thoughts that my arise unannounced, every year, some years better than others, and looking back I know why this was so due to how I prepared before competition. I was able to convince myself I'd won



only do it if I was absolutely certain of exactly what I looked like. So I did everything possible to train my mind to have a winning attitude. My deliberate focus on the most important aspects of winning gave me a tranquil confident frame of mind free of doubt as I knew in effect that I had already won. After all I'd won the two previous years so I was already Mr. Olympia and now even in greater shape for me winning again was a foregone conclusion.



Frankly Speaking

Zane Defined — the film



his whole life and wins all the top titles" or something like that is the theme and I am excited to speculate on the final product. Already interviewed are Lou Ferrigno, guitarist Steve Vai in his California studio, and first classic bodybuilding winner Danny Hester. The remainder of 2019 will be spent filming additional people of interest and currently a 'director's cut'

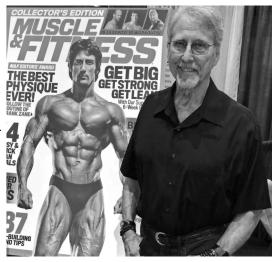
has been produced to publicize this documentary to investors.

I've spent the last month putting 31 Day Wonder Posing together. It is very valuable for competi-



tors because it will enable anyone to learn how to pose in one month and get in better shape doing it.

I spent 3 days this past April filming in Newport Beach California for the upcoming film (2020) Zane Defined. It's being done by Hostage Films. Most of the time was for interviews with some filming on the beach and shooting archery. It is intended for an audience wider than bodybuilding with the goal of appealing to people in all walks of life. "Skinny kid from Edwardsville Pennsylvania trains



31 Day Wonder Posing

is a priceless guide for anyone who wants to learn how to pose. Many photos of Frank in top shape illustrating all the poses plus a narrative on every little thing to do to look your very best, Wonder Posing is a must for all

bodybuilding competitors. But not only them This course is perfect for everyone who wants to get in shape without any equipment (except for maybe a mirror). Each of the 31 days is a complete workout made effective by holding the poses in a calm manner while tensing

all the muscles. Perfect whenever you cannot find a gym in which to workout.

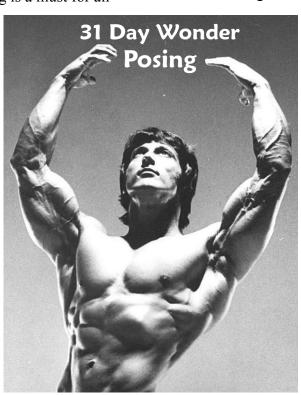
I've practiced posing for over 60 years and have learned that a posing session is the perfect practice before a meditation session. Deeper relaxation always comes after muscular tension. I've used photography to capture my physical condition over the years instead of relying on measurements, bodyweight, or percentage of body fat measurements. These are descriptions of reality not reality itself. I am interested in what I look like to other people. This is not the image that I see in

the mirror. The mirror image is back-wards. Your true image can only be seen by you in photographs.

define posing as kinetic sculpture.
The statue

moves in a rhythmic dynamic manner. Instruction is given not only in how to hit and hold a pose but also how to put a routine together, foot position and movement, and posing sequences.

This is more than you will find in any book anywhere else, the bargain of a lifetime!



91 DAY WONDER BODY is a practical guide that will provide motivation and make it easier for you to get into peak condition in 91 days. This is 13 weeks, the length of a season, one fourth of a year, the amount of time I've found by experience to make a major change in how you look and feel. 91 Day Wonder Body tells you what weight training, stretching, and aerobic program to do every day. Along with motivational tips, food choices and instruction in meditation

this is a complete guide to getting in shape. Space is provided for you to write your workout poundages, sets, and reps right in this book so it becomes your ongoing training work book 91 Day Wonder Body is a program you can use every year to reach a physical peak. The body doesn't easily acclimate to such a randomized routine. The variety of workouts will keep your mind interested and your body improving. Above all 91 Day Wonder Body is a tool

for learning how to get in shape by progressing through a variety of programs designed to overcome training sticking points.

91 DAY PEAK PHYSIQUE is a day by day structured workout program that picks up where 91 Day Wonder Body workouts end. With the Wonder Body program you work your way thru 18 different routines beginning with the full body workout, progressing thru the 2 way split, and completing your program with three different versions of the 3 way split routine. 91 Day Peak Physique is perfect for anyone preparing for physique competition with daily workouts, meal suggestions, and motivation tips. Anyone desiring to peak their physique is a candidate for this book. If you are an intermediate or advanced bodybuilder who wants to get in the best shape of your life in three months this is the perfect program for you. Utilizing three different versions

of the three way split routine keeps variety high making this a productive and interesting training program to follow. The amount of work done in each training session progressively increases over the 13 week (91 days) which results in sustained progress as the body acclimates to the increasing demands of each workout. A recommended diet is given to guide trainees in right food selection with days set aside for one's own meal planning. At-

tention is given to posing not only as instruction for physique competitors but alsso as a way to measure progress by taking photos on a regular basis. The programs in 91 Day Wonder Body, Wonder Abs, and now in 91 Day Peak Physique are all you need as a guide for a lifetime of bodybuilding success.

91 Day Peak Physique is outlined at the conclusion 0f 91 Day Wonder Body.

conclusion 0f 91 Day Wonder Body.

It is available as a pdf edition.

Each 91 Day book is \$37 postpaid in USA, \$40 in California, \$45 in Canada and Mexico, \$53 overseas. The Manual is \$77, \$83 in Ca., \$93 in Canada, \$103 overseas

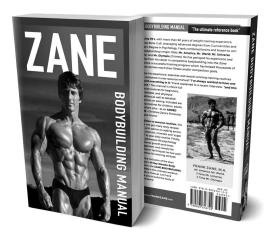
I've expanded the best of everything I've written into the **Zane Body-building Manual** which details all the factors of the Body-building Equation L==E x A x R x N, Learning is the product of Exercise, Attitude, Recupera-

tion, and Nutrition. You will find weight training, aerobics, stretching, posing instruction, personal growth techniques, deep relaxation and motivation methods, and lots about food preparation and supplementation. With all the information needed to create the body of your dreams, you can use this book your life.

It's laid out along the lines of Symmetry and is filled with workouts form Fabulously Fit Forever, High Def Body and Let's Grow books which are

now out of print. The workouts given are at the times in my career that I have used them or should have used them knowing what I know now. All the useful training information anyone needs is included in this one large volume making this the ultimate bodybuilding reference book.

Who doesn't want a trimmer waistline? Here's how to get better abs in as little as 31days.



With step by step instructions on abdominal exercises, stretches, diet, and aerobics organized into a workbook of progressive routines you can have wonder abs by going beyond the first 31 days. There's instruction every

day for a full three months. Each day's workout is more challenging!

Keep track of your workouts by writing your reps in this book along with the foods you eat. You will be amazed about how much your waistline and abdominal development will improve with a dedicated program like this. Especially if you follow it for a full 91 days.

Even if you only have 20 to 30 minutes a day you can use it to specialize on shrinking your waistline.

But by allowing even more time for your workouts and following the program to the letter you can get great abs.

You can follow the 91 Day Wonder Abs program in place of the ab routines in the 91 Day Wonder Body program for the ultimate in abdominal and total body specialization.

Let this book guide you step by step in your workouts to

get wonder abs!

