



dotFIT™

Your Fitness. Connected.

A muscular man is shown from the waist up, drinking from a black shaker bottle. The bottle has the dotFIT logo on it. The background is a blurred, reddish-pink color. The text is overlaid on the image.

Nutrition for Maximizing Muscle Gain – Legally & Without Banned Substances

Muscle Size and Performance are Not Mutually Exclusive
They Can be Symbiotic to some Degree Depending on The Sport/Activity





- Diet Overview – 10 min
 - ✓ Protein, Fats, Carbs, Water
 - ✓ Meal Timing
 - ✓ Calorie Needs and Adjustments Including Plateaus
 - ✓ Gaining Muscle While Losing Body Fat – is it Possible?
- Evidence-based Dietary Supplements – Final Edge to Push the Limits (20 min)
 - ✓ 2-categories
 - ✓ Baseline Needs
 - ✓ Supplement Programs that Work for Increasing Muscle Size
 - Tiered by Training Experience and Economics
- The Final Plateau – Where is it? (5 min)
- Q&A as long as desired
- Myth Section – Take Home Information



List of webinars/Bonus Rounds complete with Goals, Ingredient Rationale including mechanisms of action and safety profiles

- Play-span - baseline
- Protein
- AminoBoostXXL
- CreatineMonohydrate
- ExtremeCreatineXXXL
- NO7 Rage
- MuscleDefender

<https://www.dotfit.com/dotfittools>



Masterclass - Recorded Webinars

MACRONUTRIENTS



PROTEIN, FATS AND CARBOHYDRATES (CHO)

Protein 25-35% (greater if fat loss is part of goal)

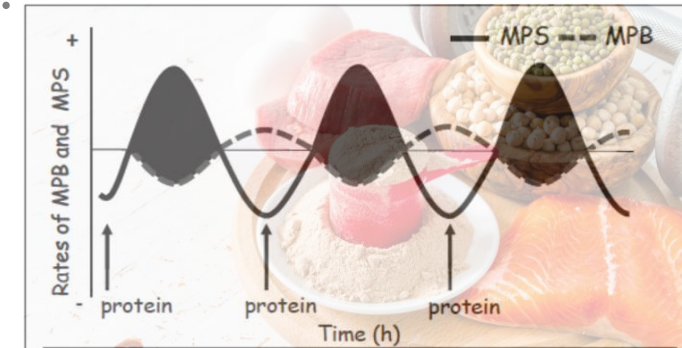
- Tissue repair & building
- Generally 1gm/LB of body weight (or LBM) –more during energy restriction
 - Divided 4-6Xs/d and pre/post workout

Carbohydrate (CHO) 40-70% (less if fat loss is part of goal)

- Fills the primary energy system that needs constant refueling for maximum performance –**some within every meal**
- Generally $\geq 2:1$ CHO:P ratio unless prolonged caloric restriction
- The greater the endurance need, the higher the CHO requirement

Fats: 20-35% (primarily unsaturated)

- Generally the remaining calories after CHO & protein needs are met



A close-up photograph of a power athlete in a black singlet and white shorts performing a squat with a barbell. The athlete's muscles are highly defined, and they are wearing black and red striped knee sleeves. The background is slightly blurred, showing a gym setting.

250LB power athlete:

250g protein

500g CHO

90g Fat(25%)

~4000cals

A photograph of several endurance athletes running on a track. They are wearing athletic gear, including singlets, shorts, and running shoes. The background shows a green field and some trees, suggesting an outdoor setting.

175LB endurance athlete:

175g P

875c CHO

70g Fat (~15%)

~5000cals

MACRONUTRIENTS



MEAL TIMING TO **LOAD ENERGY SYSTEMS**

Pre-Training Eating

➤ Major meal - 2-3.5 hours before

- High carb (40/50-70%), moderate protein, low fat & fiber
 - Ex: Turkey sub, chicken & rice, spaghetti, cereal & fruit/juice

➤ Pre-workout ~20-40min before, 25-40g protein & some CHO

- Generally liquid/fast form with $\sim .2\text{g}/\text{lb.}/\text{LBM}$ ($175\text{LBM}=35\text{g}$) ($.18/\text{lb.}/\text{BM}$)

Goal: stomach "empty", energy systems full, BS stable, hydrated, decrease damage



MACRONUTRIENTS



Fluids & Micros During Exercise

During exercise

- Depending on sport, 3-6oz water or sports drink every 15min
- For prolonged exercise greater than 60 minutes, choose a sports drink with small amounts of electrolytes
- **Personal to athlete & session**
 - ✓ Trickle in, with fluid, essential amino acids for faster recovery

MACRONUTRIENTS



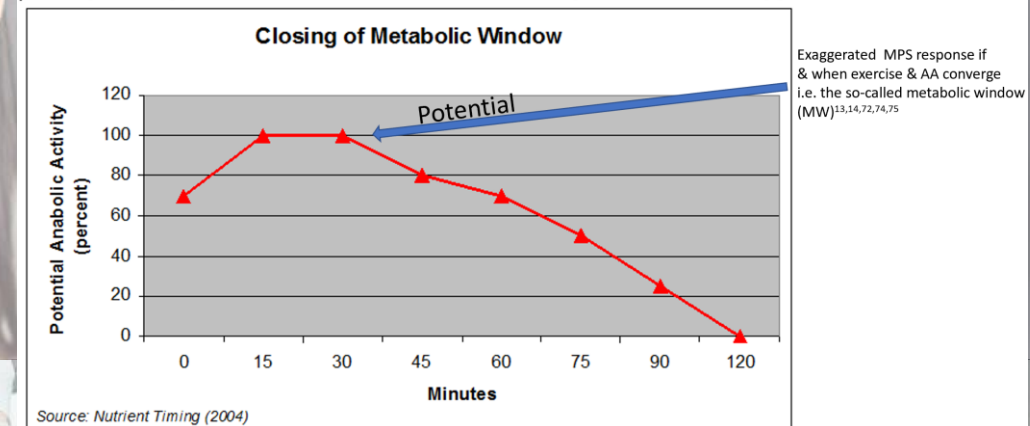
MEAL TIMING TO RECOVER & BUILD

Post-training Eating

- Immediately after activity use same "Pre" formula

Exaggerated MPS response when exercise & AA converge i.e. the so-called metabolic window (MW)

Muscle protein synthesis exercise-induced acute incremental potential immediately post exercise



Source: Nutrient Timing (2004)

MPS and Glycogen synthesis potential reaches their respective highest points almost immediately post exercise and returning to baseline within 2-3hrs^{30,33,37}

- 1-2 hours after consume regular meal



MACRONUTRIENTS



RULE 3: MEAL TIMING TO LOAD ENERGY SYSTEMS

Special considerations

- **Early morning training (“bed-to-gym/field”)**
 - Eat a large pre-training type meal the night before
 - Consume only the pre-workout snack before
- **Tournament play (multiple games)**
 - <1.5Hr break: bars and hydration/electrolyte recovery drink
 - 1.5-2.5Hr: small pre-training-type meal
 - >2.5Hr: normal pre-training meal



PERFORMANCE NUTRITION



RULE 3: MEAL TIMING TO LOAD ENERGY SYSTEMS, **HYDRATE, RECOVER & BUILD**

➤ **Fluid Recommendations**

- 16 ounces 2 hours before activity
- 8-16 oz more on hot OR humid days
- 3-6 oz every 15min during
- Drink 20 oz for every pound lost

➤ **Special Considerations for Youth**

- Tolerate heat less efficiently
- Thirst mechanisms are underdeveloped
- Youth generally do not consume enough fluid before and during training

CALORIES & ADJUSTMENTS



General Weight/Muscle gain Calorie Rules

- **250-500c >maintenance (use dF Program) to gain .5-1LB/WK***
 - ✓ Beginning exercisers, children and growing teens may gain more or adults with priority in size only
 - ✓ Gains stall/slow: add ~100-250cal to daily total (based on body size) of equal amounts of P & CHO and moderate fat. Example: 20g P, 20g CHO, 10g fat = ~250cal
 - ✓ After addition of calories, if after one-week weight gain does not occur, repeat the above process*
 - ✓ Add shakes as necessary – e.g. before bed

- **Simultaneously increase weight/muscle and performance:** males gain up to .5LB/WK; females .25LB/WK*
 - ✓ Same rules and adjustments as above unless
 - ✓ Proceed at a pace that does not compromise performance gains

*If body fat or overall weight increases undesirably, slightly reduce daily caloric intake or add a preferred form of aerobic exercise until you achieve your desired weight trend

Novices at any age can put on muscle relatively quick but the combination of age and experience significantly slows the pace over time – proper nutrition can extend the gains, prolonging the inevitable

CALORIES & ADJUSTMENTS



Gaining Muscle While Losing Body Fat

- Less gain potential but possible with:
 - ✓ Small deficit (100-300c)
 - ✓ Higher protein (>1gm/LB) split 6Xs daily
 - ✓ Supplement baseline as needed and Stacking when necessary
 - Nutrition with low/no calories to feed muscle and starve body fat



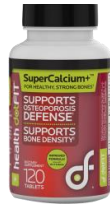


Evidence-based dietary supplements – speeding results and prolonging the final plateau

BASELINE FIRST



Before Anything: Baseline supplementation as needed for recovery & health



➤ **Multivitamin (incl. high D) & mineral [Ref2](#)**

✓ (~19-21) Synergistically with the best possible diet to fill unavoidable gaps to maximize VM activities at all stages of life

- ✓ 1000-1200mgs/day calcium [Ref3](#)
 - Diet first and supplements as needed to grow & maintain bone health

➤ **5-600mgs/day of omega 3 (EPA & DHA 3:2) [Ref4](#)**

✓ Fatty fish 2-4Xs/week or add supplement

➤ **Protein 1gm/LB LBM divided 4-5Xs/day [Ref5](#)**

- ✓ For recovery+ and staving off the inevitable
- ✓ If exercising, use ~25-35gm (depending on age) fast acting protein 30-40min before & repeat immediately following



THE NEXT LEVEL



Supplement Properly Beyond Baseline (evidence-based)

The goal of performance and/or muscle gain supplements is as follows:

- All else equal and maxed (**including baseline**), supplementing should improve performance/size outcomes when compared to a non-supplemented state to help avoid plateaus - i.e. keep getting better as long as possible

The objectives to accomplish this goal or “supplement targets”

- 1) Supply energy enhancing compounds to maximize the training session/competition (**acute performance - increase adaptation potential**)
 - ✓ Creatine monohydrate
 - ✓ Caffeine
 - ✓ Beta-alanine
 - ✓ Carbohydrate (max glycogen), nitrate (NO production) & sodium bicarbonate (buffering agent) Not discussed here
- 2) Speed recovery through minimizing protein breakdown while maximizing synthesis to produce continuing muscle & performance gains (**maximize adaptation**) – **bigger, stronger, faster**
 - ✓ Protein (discussed)
 - ✓ Creatine monohydrate
 - ✓ Essential amino acid formulas including branched-chain amino acids/leucine/HMB
 - ✓ *Glutamine – conditional*

The desired outcome of using these supplements properly is accomplishing:

- A greater and prolonged accrual of gains as opposed to a non-supplemented state

Supplementing should be separated in 2 categories: 1) acute performance and 2) long-term (better/full recovery) performance enhancement

Sport, Health, Activity Recovery, & Muscle Gain/Performance Baseline (Level1)

Daily:

- [Active Multivitamin & Mineral pg8](#)
 - Take 2 daily, one with AM meal and one with PM meal

Daily as needed:

- [FirstString](#) or [WheySmooth](#) (depending on allotted daily calories for body composition goal)
 - Use as directed to make sure you get ~1gm of protein per pound of LBM (or weight if not overweight) daily from all sources including foods divided 5 times daily
 - Can be used as a supplement to a meal or by itself (or mixed with desired supporting contents) to shore up total daily protein needs
- [SuperCalcium](#)
 - Use if you do not meet the daily needs of calcium (~1000-1200 mgs) from food/shake intake
 - Females take 1 or 2 daily with meals; if you need to take 2, take one with AM meal and the 2nd with PM meal; Males take 1 only if necessary
- [SuperOmega-3 Fish Oils](#)
 - Take 1 daily with meal if not consuming 2-4 svgs/wk of fatty fish

Workout days

- [FirstString](#) or [WheySmooth](#) (depending on allotted daily calories for body composition goal*)
 - Take 2- scoops 30-40min before workout & repeat same dose immediately post exercise

***May substitute favorite dotFIT Nutrition High Protein Bar based on venue convenience**

Meal Timings

- As possible eat every 4-hours
- Large pre-training/event meal 2-3Hr before training
- Large post meal ~30-60min after last post workout supplement

Early morning training

- Eat a large pre-training type meal the night before
- Consume only the pre-workout snack/shake before & follow workout day supplement schedule above

Tournament play (multiple games)

- <1.5Hr break: bars and hydration/electrolyte recovery drink
- 1.5-2.5Hr: small pre-training-type meal
- >2.5Hr: normal pre-training meal

Fluid Recommendations*

- 16 oz 2Hr before activity (extra 8-16 oz 1hr before on hot days)
- 4-8 oz every 20 minutes during activity
- 20 oz for every pound of weight loss post-activity

*Use electrolyte formula (e.g. Gatorade) and water as directed

General Sport Health, Activity Recovery, Performance & Muscle Gain - Level 2

Baseline + Creatine

Daily:

- **Active Multivitamin & Mineral**
 - Take 2 daily, one with AM meal and one with PM meal
- **Creatine Loading & Maintenance Strategy**
 - Mix 1 scoop (5gms) with 4-8oz of favorite fluid/shake and take 4 times daily with a carbohydrate containing meal/drink for first 5 days. Thereafter take 1-scoop twice daily to maintain stores. To help maximize creatine uptake, split doses throughout the day with meals/drinks containing protein and carbohydrate
 - On training days, use one dose before workout and one after with meals/drinks. May mix with your pre & post training formula
 - Non-training days take 1-scoop with AM meal and 1-scoop with PM meal

**Programs total daily creatine first 5 days: 20gms/d. Maintenance phase: all days-10gms. To maximize uptake, creatine intake should be spread as evenly as possible throughout the day with carb containing meals or shakes.*

Daily as needed:

- **FirstString or WheySmooth (depending on allotted daily calories for body composition goal)**
 - Use as directed to make sure you get ~1gm of protein per pound of LBM (or weight if not overweight) daily from all sources including foods divided 5 times daily
 - **If exercising use ~35gm 30-40min before workout & repeat dose immediately post workout (see below)**
 - Can be used as a supplement to a meal or by itself (or mixed with desired supporting contents) to shore up total daily protein needs
- **Super Calcium**
 - Use if you do not meet the daily needs of calcium (~1000-1200 mgs) from food/shake intake
 - Females take 1 or 2 daily with meals; if you need to take 2, take one with AM meal and the 2nd with PM meal; Males take 1 only if necessary
- **Super Omega 3**
 - Take 1 daily with meal if not consuming 2-4 svgs/wk of fatty fish

Workout days

- **FirstString**
 - **Take 2- scoops 30-40min before workout & repeat same dose 30 minutes following post exercise AminoBoostXXL dose**
- **Creatine Monohydrate**
 - On training days, use one dose before workout and one after with meals/drinks. May mix with your pre & post training formula

Health & Muscle Gain Level 3 Baseline, CrM & NO7Rage

Daily:

- **Active Multivitamin & Mineral**
 - Take 2 daily, one with AM meal and one with PM meal
- **Creatine Loading & Maintenance Strategy**
 - Mix 1 scoop (5gms) with 4-8oz of favorite fluid/shake and take 4 times daily with a carbohydrate containing meal/drink for first 5 days. Thereafter take 1-scoop twice daily to maintain stores. To help maximize creatine uptake, split doses throughout the day with meals/drinks containing protein and carbohydrate
 - On training days, use one dose before workout and one after with meals/drinks. May mix with your pre & post training formula
 - Non-training days take 1-scoop with AM meal and 1-scoop with PM meal

**Programs total daily creatine first 5 days: 20gms/d. Maintenance phase: all days-10gms. To maximize uptake, creatine intake should be spread as evenly as possible throughout the day with carb containing meals or shakes.*

Daily as needed:

- **FirstString or WheySmooth (depending on allotted daily calories for body composition goal)**
 - Use as directed to make sure you get ~1gm of protein per pound of LBM (or weight if not overweight) daily from all sources including foods divided 5 times daily
 - **If exercising use ~35gm 30-40min before workout & repeat dose immediately post workout (see below)**
 - Can be used as a supplement to a meal or by itself (or mixed with desired supporting contents) to shore up total daily protein needs
- **Super Calcium**
 - Use if you do not meet the daily needs of calcium (~1000-1200 mgs) from food/shake intake
 - Females take 1 or 2 daily with meals; if you need to take 2, take one with AM meal and the 2nd with PM meal; Males take 1 only if necessary
- **Super Omega 3**
 - Take 1 daily with meal if not consuming 2-4 svgs/wk of fatty fish

Workout days

- **FirstString**
 - **Take 2- scoops 30-40min before workout & repeat same dose 30 minutes following post exercise AminoBoostXXL dose**
- **Creatine Monohydrate**
 - On training days, use one dose before workout and one after with meals/drinks. May mix with your pre & post training formula
- **NO7Rage**
 - Take 1 to 2.5 scoops (depending caffeine sensitivity; start with one (1) and increase to two (2) if not uncomfortably affected by caffeine) approximately 10 minutes before workout (may mix with AminoBoostXXL and continue to consume during workout). See directions on label for weight dosages NO7Rage contains 175 mg of caffeine per scoop. *As a reference: Starbucks Grande-drip coffee contains ~330 mg of caffeine, close to the same amount in two (2) scoops of NO7Rage*

**Programs total daily creatine first 5 days: 20 g/d (plus 2.5-5 g from NO7 on training days). Maintenance phase: workout days = 12.5-15 g; non-workout days-10 g. To maximize uptake, creatine intake should be spread as evenly as possible throughout the day and around the workout as described and ingested with carb and/or protein containing meals or shakes.*



Dosing ExtremeCreatineXXXL+ as Standalone product

- Take 2-scoops daily (5gm creatine, 3.2gm beta-alanine, 7gm L-glutamine) to achieve immediate training benefits and reach near maximum creatine and beta-alanine supplemented levels within 28days and continue throughout the desired training period (always take with some protein and/or carbs but within allotted calories based on body composition goal)
 - ✓ On training days take 1-scoop before training and one after and may mix in your pre and post workout shake containing protein with some carbohydrate
 - ✓ On non-training days, take 1-scoop with morning meal or shake and 1-scoop with evening meal or shake
- May adjust dosage as desired based on size (i.e. 1-4 scoops) – **and now if you want to get**

JACK – STACKED – and BIG-MACKED!!!!!!!!!!!!!!!!!!!!!! DA-NEXT LEVEL

GOLD'S GYM
THE MECCA OF BODY BUILDING®
VENICE, CALIFORNIA
Presents:

ADMISSION:
DATE:
TIME:
PLACE:

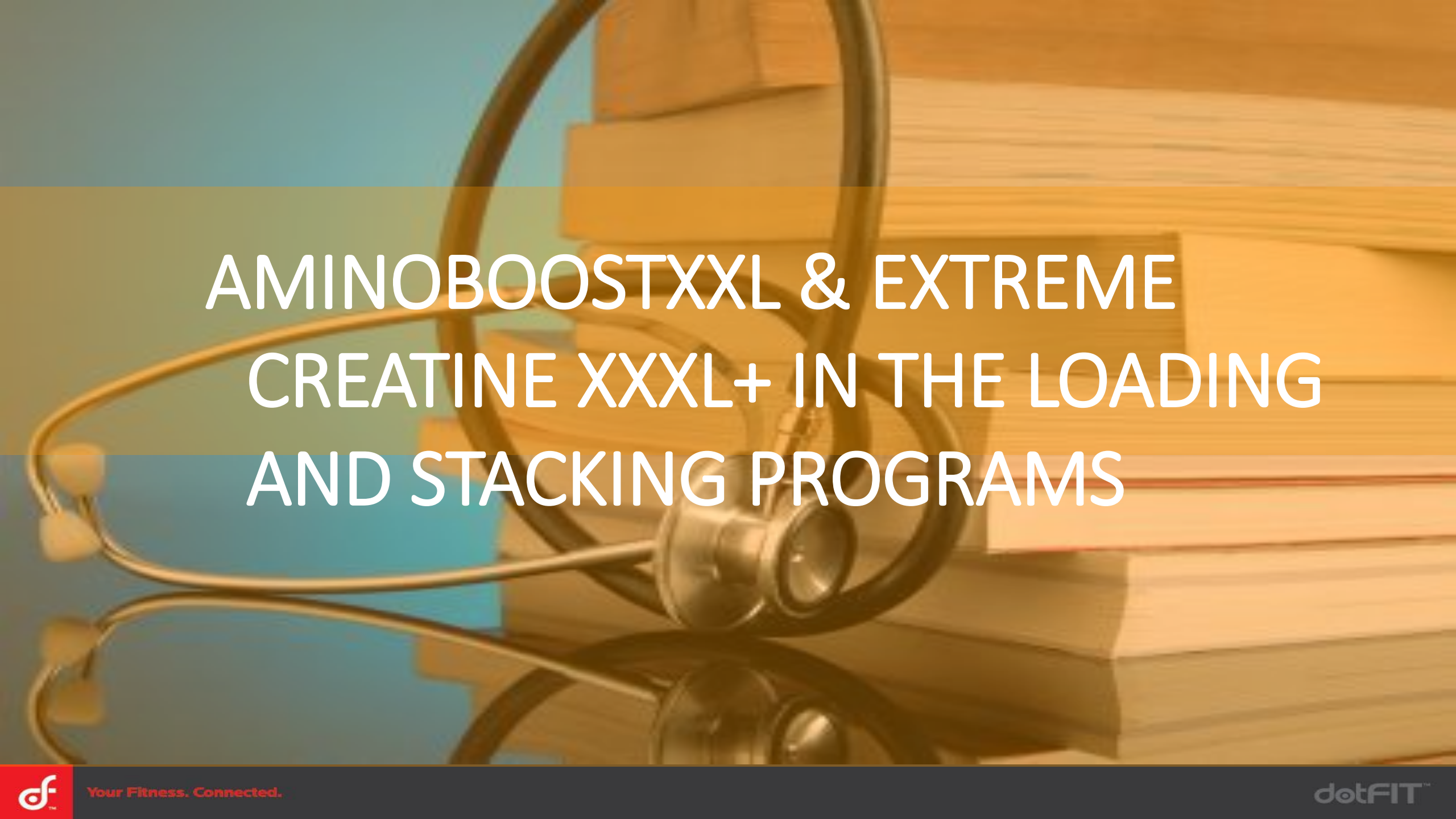
GOLD'S GYM
FOR INFORMATION:
CALL OR WRITE
358 HAMPTON DRIVE,
VENICE, CA 90291,
TEL: (213) 392-0005

NEAL SPRUCE

- MR. WESTERN USA
- MR. WESTERN AMERICA
- TOP NATIONAL COMPETITOR
- 1978 & 1980 NATIONAL AMATEUR
- NATIONAL CONSULTANT TO GOLD'S GYM, VENICE (THE MECCA OF BODY BUILDING)

NUTRITION & FITNESS SEMINAR





AMINOBOOSTXXL & EXTREME CREATINE XXXL+ IN THE LOADING AND STACKING PROGRAMS



Adult Performance & Size Supplement Plan & Instructions with Creatine Monohydrate and ExtremeCreatineXXXL+

Active multivitamin mineral formula

- Take two (2) daily: one (1) immediately following first large meal and one after final meal of the day

SuperOmega-3

- Take one (1) daily if not consuming 2-4 servings of fatty fish weekly

FirstString (or WheySmooth depending on daily calorie allotment)

- Take two (2) scoops 30-45 minutes before workout or use favorite dotFIT® bar for convenience
- Take two (2) scoops 20-30 minutes after post workout AminoBoostXXL dose
- Use anytime throughout the day as a supplement to a meal or by itself mixed with desired ingredients to add protein/calories as needed to meet calorie and protein requirements
- Be sure to ingest ~1 g of protein per pound of LBM (or weight if not overweight) daily from all sources including foods divided 4-5 times daily along with the pre/post shakes (the pre/post combined generally supplies 50-80 g of the daily requirement)

AminoBoostXXL (workout days only)

- Take one and a half (1.5) scoops approximately 10 minutes before workout (add to NO7Rage if using this product – see below) and may continue to drink during workout
- Take one (1) scoop immediately following workout

Begin Creatine Supplementation at 2nd Week of Program

2nd Week Start CreatineMonohydrate (CrM)*

- **Loading phase:** mix one (1) scoop (5g) with 4-8oz of favorite fluid/shake and take four (4) times daily with a carbohydrate containing meal/drink for first five (5) days
 - On training days, use one dose before workout and one after with meals/drinks. May mix with your pre/post training formula
- **Maintenance phase:** after five (5) day loading phase:
 - On training days Take one (1) scoop daily with post workout shake.
 - On non-training days take one (1) scoop with any meal when not taking ExtremeCreatineXXXL+ (i.e. use ExtremeCreatine at different times so total creatine is evenly dispersed throughout the day)

Add ExtremeCreatineXXXL+ on 6th day of 2nd Week

2scoops supply 3.2gm of beta-alanine, 5gm of creatine monohydrate and 7gm L-glutamine

- **Take 2-scoops daily** (always take with some protein and carbs but within allotted calories based on body composition goal)
 - **On training days:** take 1-scoop before training with pre-workout full meal (generally two to three hours pre-workout). If not possible based on early training, take with pre-workout shake. Take remaining dose (1-scoop) any time with meal or shake when not taking a CreatineMonohydrate dose to help evenly spread total creatine intake throughout the day.
 - **On non-training days:** take 1-scoop with morning meal or shake and 1-scoop with evening meal or shake

**Programs total daily creatine: Loading phase 20gms/d. Thereafter 10gms/d. To maximize uptake, creatine intake should be spread as evenly as possible throughout the day and around the workout as described and ingested with carb and/or protein containing meals or shakes. Beta-alanine content is 3.2 throughout the supplemented period once starting CreatineXXXL*

Adult Stack NO7 & ExtremeCreatineXXXL+ Performance & Size Supplement Plan

Active Multivitamin Mineral Formula

- Take two (2) daily: one (1) immediately following first large meal and one after final meal of the day

SuperOmega-3

- Take one (1) daily if not consuming 2-4 servings of fatty fish weekly

FirstString (or WheySmooth depending on daily calorie allotment)

- Take two (2) scoops 30-45 minutes before workout or use favorite dotFIT® bar for convenience
- Take two (2) scoops 20-30 minutes after post workout AminoBoostXXL dose
- Use anytime throughout the day as a supplement to a meal or by itself mixed with desired ingredients to add protein/calories as needed to meet calorie and protein requirements
 - Be sure to ingest ~1 g of protein per pound of LBM (or weight if not overweight) daily from all sources including foods divided 4-5 times daily along with the pre/post shakes (the pre/post combined generally supplies 50-80 g of the daily requirement)

AminoBoostXXL (workout days only)

- Take one and a half (1.5) scoops approximately 10 minutes before workout (add to NO7Rage if using this product – see below) and may continue to drink during workout
- Take one (1) scoop immediately following workout

Begin ExtremeCreatineXXXL+ at 2nd Week

2scoops supply 3.2gm of beta-alanine, 5gm of creatine monohydrate and 7gm L-glutamine

- **Take 2-scoops daily** (always take with some protein and carbs but within allotted calories based on body composition goal)
 - **On training days:** take 1-scoop before training with pre-workout full meal (generally two to three hours pre-workout). If not possible based on early training, take with pre-workout shake. Take remaining dose (1-scoop) any time with meal or shake to help evenly spread total creatine intake throughout the day
 - **On non-training days:** take 1-scoop with morning meal or shake and 1-scoop with evening meal or shake

Add NO7Rage at 3rd week (workout days only)

One (1) scoop contains 2.5 g CrM and 1 g beta-alanine (BA)

- Take one to two and a half (1-2.5) scoops (depending on weight and caffeine sensitivity; start with one scoop and increase to two (2) if not uncomfortably affected by caffeine) approximately 10 minutes before workout (may mix with AminoBoostXXL and continue to consume during workout). See directions on label for weight dosages
 - NO7Rage contains 175 mg of caffeine per scoop. *As a reference: Starbucks Grande-drip coffee contains ~330 mg of caffeine, close to the same amount in two (2) scoops of NO7Rage*

Programs total daily creatine: 5gm/d. At third week on workout days total creatine will be 7.5-12.5 g/day and 5gm on non-workout days. Total BA intake 5.2 g/day on workout days (two (2) scoops NO7Rage). 3.2gms on non-workout. To maximize uptake, creatine intake should be spread as evenly as possible throughout the day and around the workout as described and ingested with carbohydrates and/or protein.

Adult Super Stack NO7, ExtremeCreatineXXXL+ & CreatineMonohydrate Performance & Size Supplement Plan

Active Multivitamin Mineral Formula

- Take two (2) daily: one (1) immediately following first large meal and one after final meal of the day

SuperOmega-3

- Take one (1) daily if not consuming 2-4 servings of fatty fish weekly

FirstString (or WheySmooth depending on daily calorie allotment)

- Take two (2) scoops 30-45 minutes before workout or use favorite dotFIT® bar for convenience
- Take two (2) scoops 20-30 minutes after post workout AminoBoostXXL dose
- Use anytime throughout the day as a supplement to a meal or by itself mixed with desired ingredients to add protein/calories as needed to meet calorie and protein requirements
 - Be sure to ingest ~1 g of protein per pound of LBM (or weight if not overweight) daily from all sources including foods divided 4-5 times daily along with the pre/post shakes (the pre/post combined generally supplies 50-80 g of the daily requirement)

AminoBoostXXL (workout days only)

- Take one and a half (1.5) scoops approximately 10 minutes before workout (add to NO7Rage if using this product – see below) and may continue to drink during workout
- Take one (1) scoop immediately following workout

Begin Creatine Supplementation at 2nd Week of Program

2nd Week Start CreatineMonohydrate (CrM)*

- **Loading phase:** mix one (1) scoop (5g) with 4-8oz of favorite fluid/shake and take four (4) times daily with a carbohydrate containing meal/drink for first five (5) days
 - On training days, use one dose before workout and one after with meals/drinks. May mix with your pre/post training formula
- **Maintenance phase:** after five (5) day loading phase:
 - On training days Take one (1) scoop daily with post workout shake.
 - On non-training days take one (1) scoop with any meal when not taking ExtremeCreatineXXXL+ (i.e. use ExtremeCreatine at different times so total creatine is evenly dispersed throughout the day)

Add ExtremeCreatineXXXL+ on 6th day of 2nd Week

2scoops supply 3.2gm of beta-alanine, 5gm of creatine monohydrate and 7gm L-glutamine

- **Take 2-scoops daily** (always take with some protein and carbs but within allotted calories based on body composition goal)
 - **On training days:** take 1-scoop before training with pre-workout full meal (generally two to three hours pre-workout). If not possible based on early training, take with pre-workout shake. Take remaining dose (1-scoop) any time with meal or shake when not taking a CreatineMonohydrate dose to help evenly spread total creatine intake throughout the day
 - **On non-training days:** take 1-scoop with morning meal or shake and 1-scoop with evening meal or shake

Add NO7Rage at 4th week (workout days only)

One (1) scoop contains 2.5 g CrM and 1 g beta-alanine (BA)

- Take one to two and a half (1-2.5) scoops (depending on weight and caffeine sensitivity; start with one scoop and increase to two (2) if not uncomfortably affected by caffeine) approximately 10 minutes before workout (may mix with AminoBoostXXL and continue to consume during workout). See directions on label for weight dosages
 - NO7Rage contains 175 mg of caffeine per scoop. *As a reference: Starbucks Grande-drip coffee contains ~330 mg of caffeine, close to the same amount in two (2) scoops of NO7Rage*

Programs total daily creatine: Loading phase 20 g/d. Thereafter until fourth week 10g/d. At fourth week on workout days 12.5-15 g/day and 10 g on non-workout days. Total BA intake 5.2 g/day on workout days (two (2) scoops NO7Rage). 3.2gms on non-workout. To maximize uptake, creatine intake should be spread as evenly as possible throughout the day and around the workout as described and ingested with carbohydrates and/or protein.

Common Myths

Myth:

Muscle full effect 20-25gm/meal

Actual:

Depends on size, muscles worked, workout time & intensity but ~.2g/lb/BM because of co-ingestion of foods that alter rates of digesting/absorption thus pattern of aminoacidemia for MPS

Common Myths

Myth:

high protein hurts kidneys and bones

Actual:

>4Xs RDA shown safe in healthy people and may actually improve bones

Common Myths

Myth (at least for now):

Casein builds more muscle during sleep

Actual:

not enough data and splitting hairs for now

Common Myths

Myth:

Vegans can't build as much muscle as omnivores

Actual:

they probably could but more nutrition combining &
supps

Common Myths

Myth:

Caffeine is an endurance ergogenic aid only

Actual:

latest meta-analysis confirms significant ergogenic effects of caffeine ingestion on maximal muscle strength of upper body and muscle power (1.3-3mg/LB -60m before)

- 1-RM, jumping, etc.

Common Myths

Myth:

timing is not important

Actual:

it is to maximize MPS

AMINOBOOSTXXL USE & DOSING



Dosing

- ≤150lbs: 12g 10min before workout & may continue to consume throughout; repeat dose immediately after
- >150lbs add ~5% (0.6g) for each 10lb body Wt.
 - Example 200lbs: add 3g (15g per dose); 250lb 18g

Maximizing MPS*

- If calories permit, use your pre-workout complete protein formula ~40min before WO; AB 10min before & during and repeat immediately after WO; post workout complete protein 30-40 minutes after AB post workout dose
- Repeat AB dose before bedtime to potentially maximize results

Non-exerciser >30yrs & Age Dosing

- 15 g per dose (~1.25 scoop) and take three times daily between meals with one dose before bedtime
- Aging (> 50 years old) may increase dosage needs 20% for each decade (ex: at age 60 years dosage may be 18 g) based on the body's resistance to the anabolic effects of amino acids and related protein synthesis mechanisms in advancing years

Beneficiaries and Typical Use

- Athletes for continuous physical progress- breaking or avoiding plateaus – i.e. stacking*
- Low calorie, high anabolic pre & post workout supplement to maximize MPS during prolonged energy restriction (physique competitors, fighters/wrestlers, weightlifters, etc.)
- Older athletes seeking physical improvements as the body becomes more resistant to anabolic effects of food and exercise
- Multiple daily training sessions or tournament play before and after each event
- All non-exercisers over 30 years of age to help stave off age-related loss of muscle
- Low calorie, low nitrogen and low sulfur producing protein supplement as needed, especially in ageing

Essential Amino Acids (EAA) including BCAA

Goal: Stimulate MPS independently (or incrementally) from/to other mechanisms – i.e. additive to intact protein with extreme low calories– 8-EAA can proportionally hit the bullseye on each target

- EAA directly increase SM Ras-related GTP Binding B (RAGB) mRNA (ex: 60% over normal protein feedings⁴⁰)
 - RAGB signals interact with mTORC1 in an AA-sensitive manner and are necessary for the activation of the mTORC1 pathway by AA⁴⁰

The 8 EAA responsible for MPS can hit the rate limiting aspect of each MPS mechanism (e.g. mTOR, RAGB, etc.) and targets of inhibition of MPB (e.g. AMPK, autophagy, etc.)^{28,43,48,49,50}

More and faster to muscles^{10,28,41,42,81,93,100}

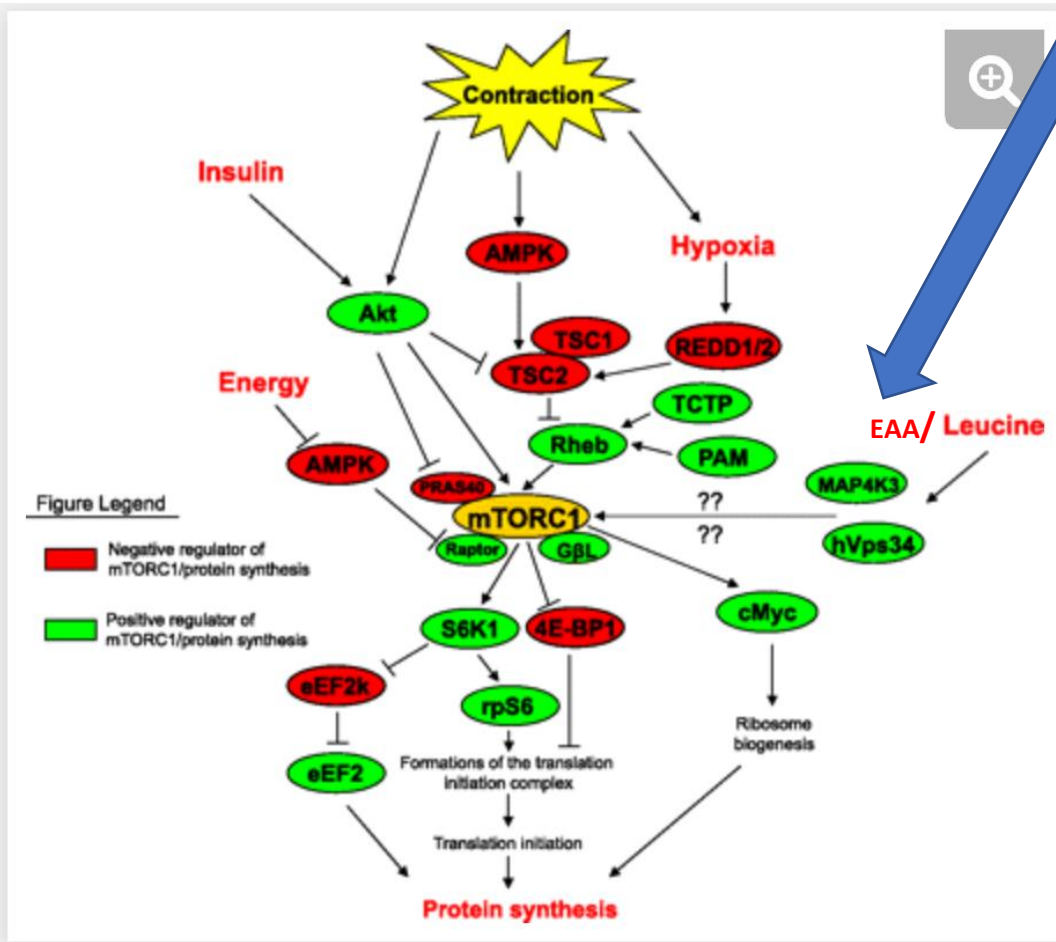
- Less splanchnic extraction (more available for MPS)
- Less competition for transporters
- Greater activation of transporters
- Ideal environment of hyperaminoacidemia –continuous MPS signal

Increases production of leptin by adipocytes -contributes to appetite regulation

Amounts in a effective 12gm serving^{9,28,37,48,49,58}

L-Leucine	4000 mg
L-Phenylalanine	1670.5mg
L-Lysine HCl	1669.5 mg
L-Threonine	1300 mg
L-Valine	1100 mg
L-Histidine	900 mg
L-Isoleucine	900mg
DL-Methionine	360mg

Mammalian target of rapamycin complex 1



Little to no evidence for efficacy or safety for Muscle Gain

WADA prohibited Substance List

<https://www.wada-ama.org/en/media/news/2018-09/wada-publishes-2019-list-of-prohibited-substances-and-methods>

- Alpha-ketoglutarate
- Arginine
- Boron
- Chromium
- Conjugated linoleic acids (CLA)
- D-Aspartic acid
- Ecdysterones
- Fenugreek extract
- Gamma oryzanol (Ferulic acid)
- Growth-hormone releasing peptides and Secretagogues
- Isoflavones
- Ornithine-alpha-ketoglutarate
- Prohormones
- Sulfo-polysaccharides
- Tribulus terrestris
- Vanadyl sulfate
- Zinc-magnesium aspartate

Q: will you make testosterone boosters/secretagogues?

A: We don't deal with purported testosterone, growth hormone (or any hormone) secretagogues since true one's are clinically applied and those masking as dietary supplements are controversial at best. Our distribution is too wide including in college and pro sports where these products are banned, and our insurance won't cover them.

We don't make a "direct testosterone booster" because there are no legal dietary supplements that fall into the evidence-based category – i.e. not enough proof they work or safe and can increase testosterone enough to enhance performance or muscle gain – and if they did, it could be harmful long-term.

And besides – our super stack is far more powerful than any legal supplement(s) program



The Final Plateau – where is it?

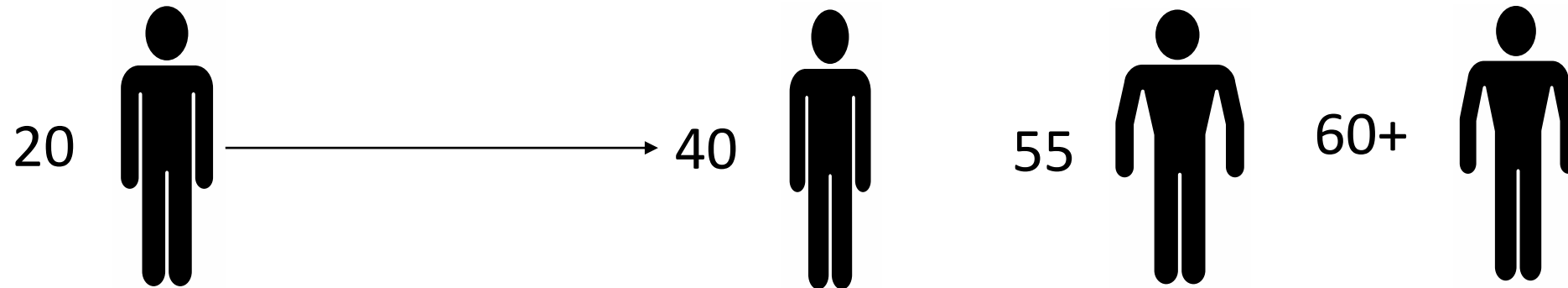
The “Age Experience Intersection” is the Final Plateau

The Final Muscle Gain/Performance Plateau is the inevitable age-related performance and size decline that depends on when you started serious training and how long you’ve been doing everything “perfect”

Once you have approached the "age experience" intersection* of training, the only thing you can do is slow the inevitable size/performance decline by doing all the right things (e.g. diet, supplements, training, rest, etc.).



Novices at any age can put on muscle relatively quick but combination of age and experience significantly slows the pace over – proper nutrition can fast track (greater gains in each decade) and extend the gains (longer competitive potential), prolonging the inevitable



By the way – the brain is different – has the potential to keep going