

# dotFIT Masterclass - Hot Topics in Fitness

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Founder & CEO, Neal Spruce & VP, Nutrition Services, Kat Barefield, MS, RD, CPT

# Content to be Presented

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- Fasting
- Diet Breaks
- Vitamin D
- Collagen Protein
- New Years Resolutions
- Special Offer on NASM Weight Loss Specialist Course





# Fasting for Weight or Fat Loss

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Little to no eating for  
a specified time  
period



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# Intermittent Fasting – Umbrella Term for Various Fasting Types

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Alternate Day - 24 hours of eating 0-25% of calorie needs followed by 24 hours of unrestricted eating



Periodic Whole Day - At least one 24-hour period of eating 0-25% of calorie needs

Example: 5:2



Time Restricted Eating - daily practice of unrestricted eating within a set time frame of 4-12 hours

Examples: 16-8, Ramadan

# Intermittent Fasting & Weight Loss – 2018 Research Review



- Animal and human studies included
- Nearly all IF studies resulted in weight loss of 2.5-9.9%
- Studies vary greatly by type of fasting and population
- Controlled trials comparing different forms of fasting with continuous calorie restriction up to 12 months show similar weight and fat loss results
- Higher dropout with ADF - as high as 40%

# Intermittent Fasting & Weight Loss – 2020 Research Update

## **Intermittent fasting and weight loss**

Systematic review

Stephanie Welton MSc Robert Minty MD CCFP FCFP  
Teresa O’Driscoll MD FCFP Hannah Willms Denise Poirier RPN  
Sharen Madden MD MSc FCFP Len Kelly MD MClInSci FCFP FRRM

- Overweight or obese participants
- All 27 trials observed weight loss: 0.8% to 13% of starting body weight
- Duration of most studies was short term: 2 to 26 weeks
- Protocols varied: ADF, 5:2 and TRE
- 0-25% of calorie needs on non-fasting days
- 12 studies comparing IF to traditional calorie restriction found similar weight loss results and adherence rates



# The Impact of Fasting + Resistance Training on Lean Body Mass

PMID: [32781538](https://pubmed.ncbi.nlm.nih.gov/32781538/); Keenan et al., 2020



*nutrients*



*Review*

## **The Effects of Intermittent Fasting Combined with Resistance Training on Lean Body Mass: A Systematic Review of Human Studies**

Stephen Keenan \*, Matthew B. Cooke  and Regina Belski

- Review of 8 studies
- Active, trained (non-elite level), overweight and normal weight subjects
- Short duration of 4-8 weeks
- Lean body mass was maintained with IF + resistance training
- Significant decreases in body fat mass or percentage in 5 of 8 studies

# Intermittent Fasting for Weight Loss & LBM – Key Takeaways

- **Simple**
- Equally effective as traditional dieting
- ~20-30% decrease in daily calorie intake
- LBM maintained when combined with RT in short term studies <8 weeks
- Emerging research demonstrates benefits on health biomarkers and microbiome
- Adherence may be difficult due to hunger on fasting days
- May negatively impact social life
- Various fasting protocols with limited research and no direct comparison studies – best practices have not been established.
- Longer studies are needed

# Diet Breaks

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- Periods of consuming maintenance calories in between periods of calorie restriction
- Also known as Intermittent Energy Restriction and Refeeds
- Aimed at making weight loss easier by alleviating hunger and feelings of deprivation while preserving metabolism to prevent weight regain



# Diet Breaks in Obese Men – The MATADOR Study

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- Minimizing Adaptive Thermogenesis and Deactivating Obesity Rebound
- 46 obese, sedentary men randomized to Intermittent (INT) OR Continuous Energy Restriction (CON)
- Group 1 (CON) – 16 weeks at 33% calorie deficit
- Group 2 (INT) – 2 weeks at 33% calorie deficit followed by 2 weeks at maintenance (30 weeks total)

OPEN

International Journal of Obesity (2018) 42, 129–138

[www.nature.com/ijo](http://www.nature.com/ijo)

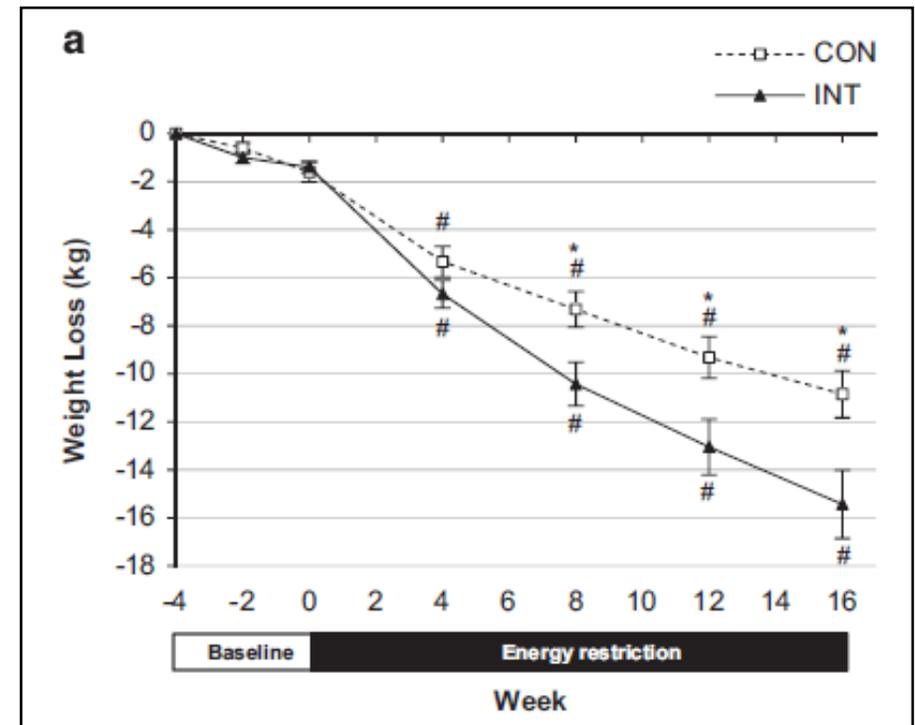
ORIGINAL ARTICLE

Intermittent energy restriction improves weight loss efficiency in obese men: the MATADOR study

NM Byrne<sup>1,2</sup>, A Sainsbury<sup>3</sup>, NA King<sup>2</sup>, AP Hills<sup>1,2</sup> and RE Wood<sup>1,2</sup>

# Diet Breaks in Obese Men – The MATADOR Study

- Diet break group (INT) lost more weight:
  - 31 vs. 20 lbs
- Diet break group lost more fat mass (27 vs. 17.6 lbs)
- Fat Free Mass loss was similar
- Diet break group maintained resting energy expenditure significantly better



# Diet Breaks in Lean, Resistance Trained People

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- 27 young males and females randomized to
  - Group 1: 25% calorie deficit
  - Group 2: 5 days with 35% calorie deficit followed by 2 days of maintenance calories (from carbs only)
- 7 weeks long with 4 days/week of resistance training (RT)
- Whey protein (25 g) after RT

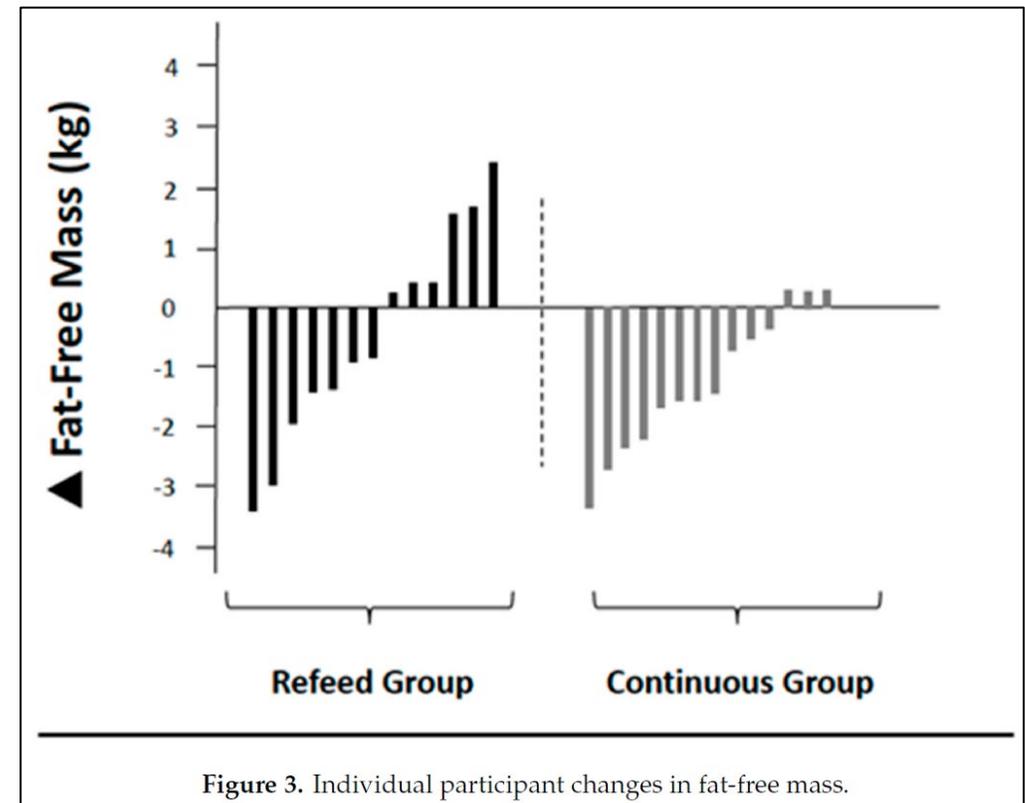
Article

**Intermittent Energy Restriction Attenuates the Loss of Fat Free Mass in Resistance Trained Individuals.  
A Randomized Controlled Trial**

Bill I. Campbell <sup>1,\*</sup> , Danielle Aguilar <sup>1</sup>, Lauren M. Colenso-Semple <sup>1</sup>, Kevin Hartke <sup>1</sup>, Abby R. Fleming <sup>1</sup>, Carl D. Fox <sup>1</sup>, Jaymes M. Longstrom <sup>1</sup>, Gavin E. Rogers <sup>1</sup>, David B. Mathas <sup>1</sup>, Vickie Wong <sup>1</sup>, Sarah Ford <sup>1</sup>  and John Gorman <sup>2</sup>

# Diet Breaks in Lean, Resistance Trained People

- Diet breaks (“refeeds”) maintained fat free mass significantly better (-0.88 vs. -2.86 lbs)
- Resting Metabolic Rate was slightly better maintained in diet break group (-38 vs. -79 kcal)



Extra Vitamin D –  
Beyond Diet and  
Multivitamin &  
Mineral (MVM)

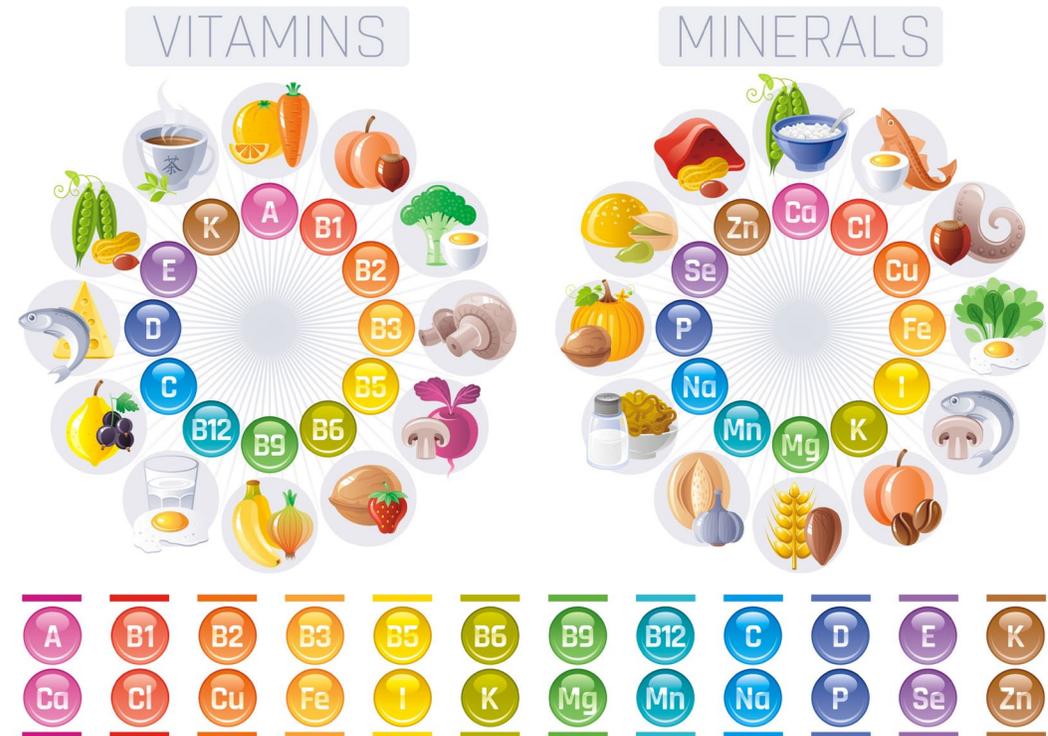
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# Vitamin D

**Vitamin D, like all vitamins and essential minerals (VM) is indispensable to human life and works synergistically with all VM**

- Every human system (e.g., cardio, muscular, brain/CNS, immune, skeletal, etc.) is vitamin and mineral dependent.
- Life does not start or continue without all 32 working synergistically
- Science established V&M RDAs to be amounts needed to optimize structural and functional health outcomes at all life-phases
- Less than the RDAs creates lesser structural and functional potential
- No one gets the RDAs from food alone, therefore should supplement daily in diet corrective amounts
  - Low-dose inexpensive **complete MVM** fills known gaps (with relatively high C&D)



# Extra Vitamin D Beyond Diet and MVM Content

**Vitamin D as a separate supplement (same rationale as above as it underpins most all systems & almost 100% fall way short from diet)**

- IOM: 20ng/ml for bone health only; top vit-D scientist for best overall health:  $\geq 30$ ng/ml; Sports nutritionist:  $\geq 40$ ng/ml (<60)
- Most will need an extra supplement if not long time dotFIT MVM users or trying to get to 40ng/ml (e.g., 1-2 daily)
- Everyone could add 1-2 daily during high health risk periods or strenuous prolonged training periods
- Vitamin D supplementation is a lifelong preventative measure – not a treatment
  - The earlier you maintain levels, the better the health outcomes at each life-phase
- Take a complete MVM/D with minimum 800 IU (20mcg) of Vitamin D; add 1000 IU (25mcg)/D if an athlete or during periods of high health risks

# VITAMIN D (VITAMIN HORMONE) HISTORY



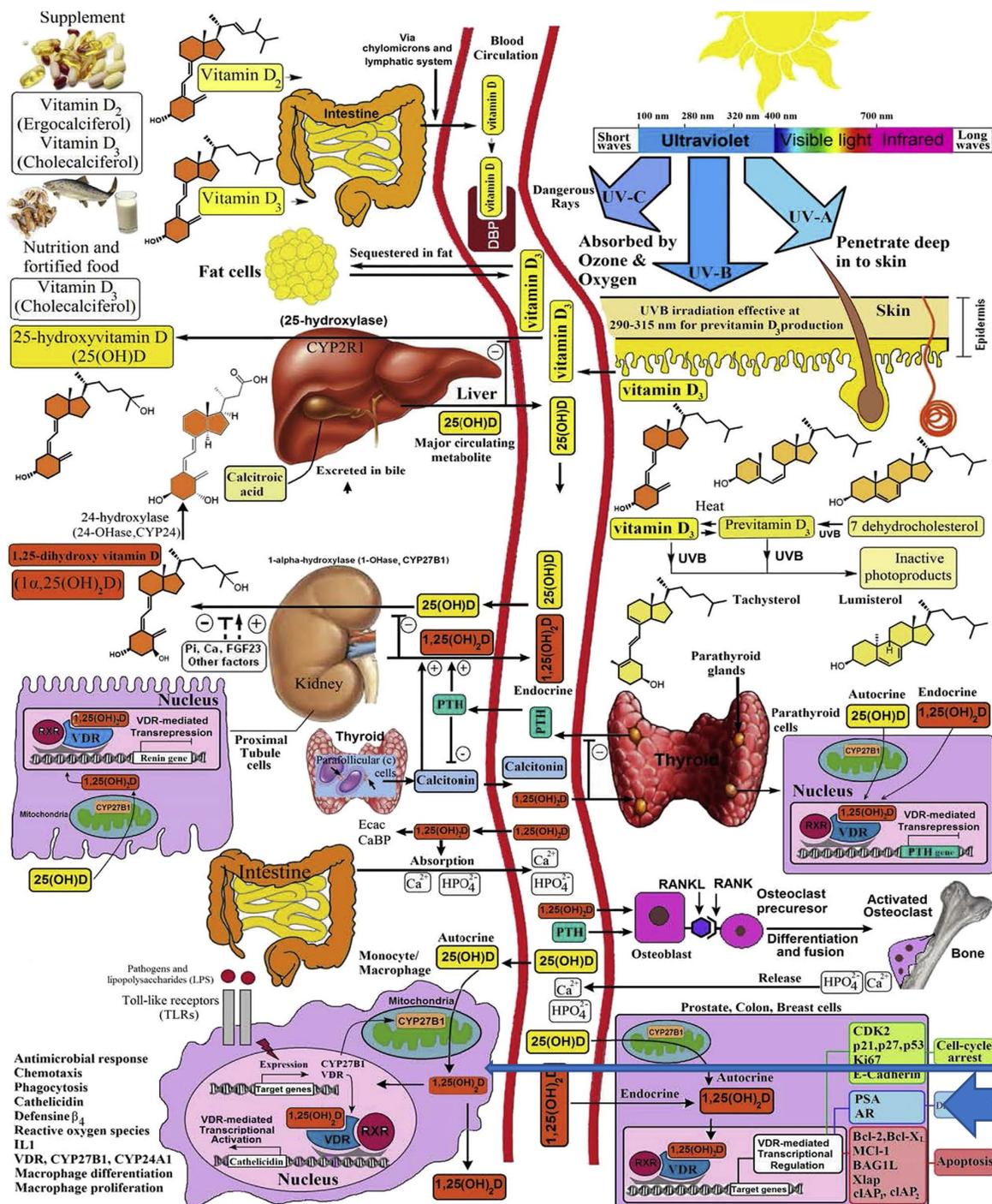
- Early humans
  - ✓ Scarce food sources, evolved to synthesize from sun, short lifespans
- Industrial revolution
  - ✓ Moved indoors, deficiencies widespread (bone deformities), onset of fortification and eventual “milkman”
- Current longer lifespans allow insufficiencies to manifest beyond bone, compromising most other body systems, including immune, setting off an avalanche of research and change in recommendations in 2010
- Decreases in sun exposure and non-dairy diets (e.g., veganism) have brought back deficiencies
  - ✓ Current: aversion to fatty fish, shrinking likeness for fortified milk or foods, and impractical or unhealthy sun exposure –forces supplementation
- Most globally recommended supplement based on deficiency/insufficiency
  - ✓ 97-100% below the EAR<sup>1</sup>
  - ✓ Vitamin D deficiency is its own pandemic<sup>2</sup> (over 1 billion known)
- 2020 COVID-19 brings D to the forefront – 400% sales increase
  - ✓ Dr Fauci suggest regular usage (and vitamin C) as he does

<sup>1</sup>**EAR:** Estimated average requirement – well below RDAs (based on bone health only)

A nutrient intake value that is estimated to meet the requirement of **half the healthy** individuals in a particular life stage and gender group

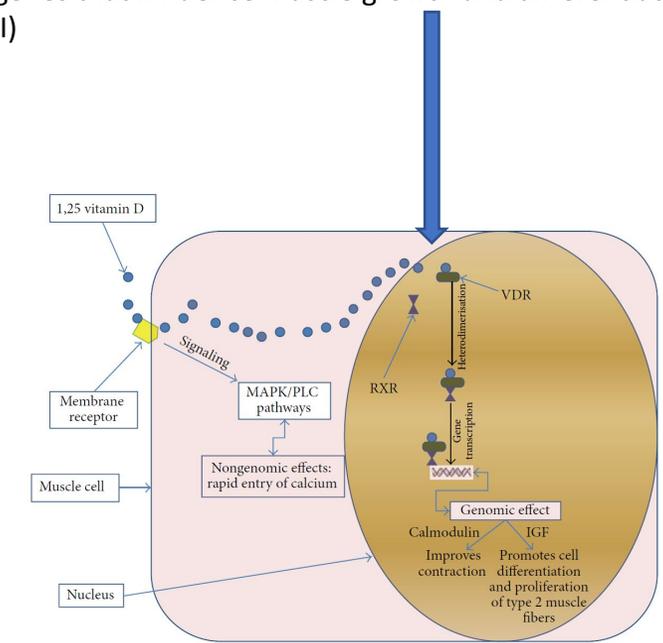
**RDA:** The dietary intake level that is sufficient to meet the nutrient requirement of **nearly all healthy** individuals in a particular life stage

<sup>2</sup>Epidemic occurring worldwide, or over a very wide area, crossing international boundaries and usually affecting a large number of people”



Vitamin D supports the functioning of most body systems (everywhere there are vitamin-D receptors [VDR])  
 Almost 100% of the population is below new recommendations forcing a triage effect (diversion to absolute survival needs)

Discovery of Vitamin D activity in muscle made supplementation common for attenuating muscle weakness, reducing related falls/ injuries making it popular in sports and aging as it activates expression of genes that influence muscle growth and differentiation, particularly in fast-twitch fibers (type II)



**Bone**

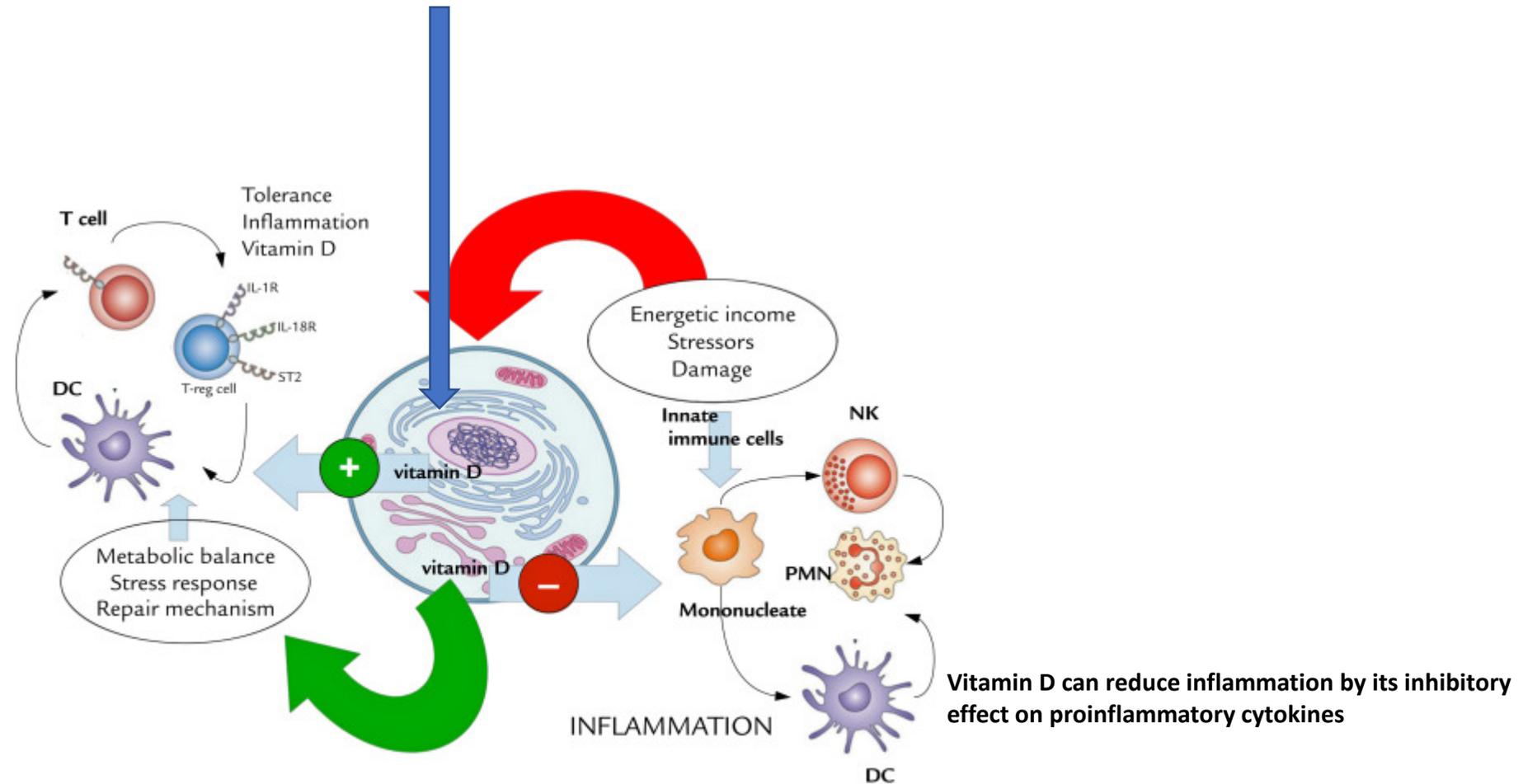
**Immune Function**

**Other cells/tissues with VDR**

Synthesis and metabolism of vitamin D for skeletal and non-skeletal function. Michael F. Holick. Cancer, sunlight & vitamin D. Review, Journal of Clinical & Translational Endocrinology 1 (2014)

# Vitamin D in the Immune System – A Pro Survival Function by Controlling the Immune Response

Vitamin D may decrease the risk of viral infections with regulation of the immune system response against viral activity



Activity of vitamin D as a pro-survival molecule. Stress and damage signals (red arrow) enter the cell and elicit vitamin D activity to balance the response by promoting and activate (green arrow) a tolerogenic, T-helper 2-type, M2-type and regulatory T-cell (T-reg) type anti-inflammatory response to restore energetics and redox homeo-dynamics. DC = dendritic cell; IL = interleukin; NK = natural killer; PMN = polymorphonuclear leukocyte.

<https://doi.org/10.1016/j.clinthera.2017.03.021>



## Meta-analysis on vitamin D's impact on musculoskeletal health and peak athletic performance in athletes: [Ref1](#)

- 1) Same deficiency and insufficiency rate in athletes as the general population
  - ✓ 5% of college athletes met the US Recommended Dietary Allowance (RDA), which yields less than recommended athletic Vitamin D levels
- 2) Serum level  $\geq 30$  ng/ml provides sufficient mineralization of non-mineralized bone matrix thus important to skeletal health
  - ✓ Vitamin D increases activity of IGF-1 through induction of its receptor expression -crucial effect on bone formation
- 3) levels  $>40$  ng/ml offered a protective effect on the development of stress fractures;
  - ✓ 20 ng/mL associated with double risk of tibial & fibular stress fractures in female naval cadets compared to  $>40$ ng/mL
- 4)  $\geq 30$  ng/ml positively correlated with an accelerated regeneration of muscular force
- 5) Researchers agreed levels  $>50$ ng/ml may be required for athletes to achieve maximal physical performance

## Latest 2020 Review: [Ref2](#)

**The importance of maintaining adequate levels of vitamin D and to the possible positive influence supplementation has on immune and musculoskeletal functions in athletes, benefiting their performance and preventing future injuries**

- Compilation of all studies –same conclusion

# SUMMARY & BEST RECOMMENDATION



## Recommendation Rationale:

- Vit-D, a vitamin hormone active in most body regions, especially important to bone formation and immunity. Proper levels support the “prevention before cure approach”
- If levels are low, it takes months of regular supplementation to achieve adequate status and Vit-D does not work in a vacuum
- Experts/doctors (and Fauci), recommend achieving levels set by the Task Force for the Clinical Guidelines Subcommittee of the Endocrine Society (ES)
- Measured by Vitamin D, (specifically 25(OH)D) serum concentrations of at least 30-40ng/ml ( $\geq 70-90$  nmol/L)
- ✓ May not be possible without single high-dose vitamin D supplementation – i.e., beyond what’s achievable from healthy sun exposure and/or daily MVM, even if said formula contains Vit-D3 in amounts higher than the current daily recommendation of 600-800 IUs
- Relative high dosing (2-4 times RDA) appears to have no downside but significant potential upside

# SUMMARY & BEST RECOMMENDATION



## Here Is What To Do

- Continue to use your MVM containing at least 1000 IU (25mcg) of vitamin D
- Following at least one month of supplementation at this level, have your doctor include a vitamin D status test (serum concentrations of 25(OH)D) at your next checkup
- If levels are less than 30ng/ml, use Vitamin D3 supplement to raise levels  $\geq 30$ ng/ml or as your doctor suggests
- From our experience, **it requires an additional 1000 IU/D (25mcg) to raise your levels 5 ng/ml**
- At your next checkup, confirm that you've reached Vitamin D levels of  $\geq 30$  ng/ml.
- During high health risk periods (e.g., flu/viral season/exposure, intense prolonged training, etc.)
  - Add 1-2 vitamin D 1000IU (25mcg) capsules to your daily MVM supplement intake

### When blood tests are not available:

- Up to 70 years of age: consume 1,000-1,500 IUs per day of vitamin D3 from supplements
- Overweight adolescents and adults, persons >70 years, active adolescents, and adult athletes: consume 2,000 IUs per day of vitamin D3 from supplements

# Collagen Protein

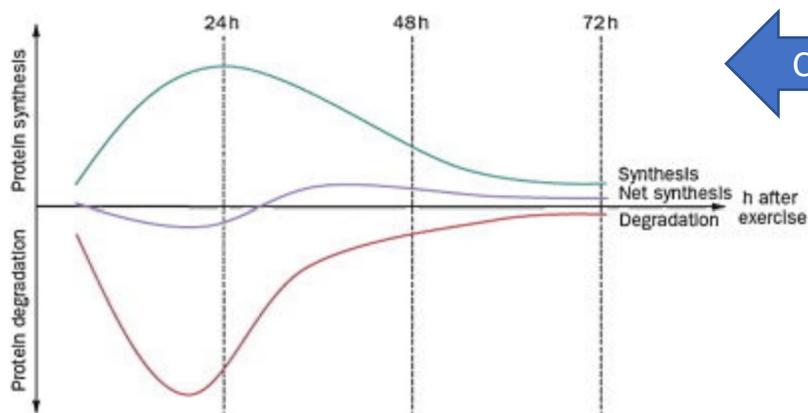
- Primary uses based on functional properties of the intact protein:
  - Joint/bone health & recovery in athletes
  - Joint/pain
  - Skin health (hair/nails)
- Mainstream science:
  - With the possibility of few exceptions, taking collagen or its building blocks (amino acids) is unlikely to help unless you're deficient/insufficient in the amino acids that make up collagenous tissues



# WHAT IS COLLAGEN (COL) & HOW ARE COL SUPPLEMENTS (COLS) IN EXERCISERS/ATHLETES (GELATIN HAS SIMILAR AA PROFILE)

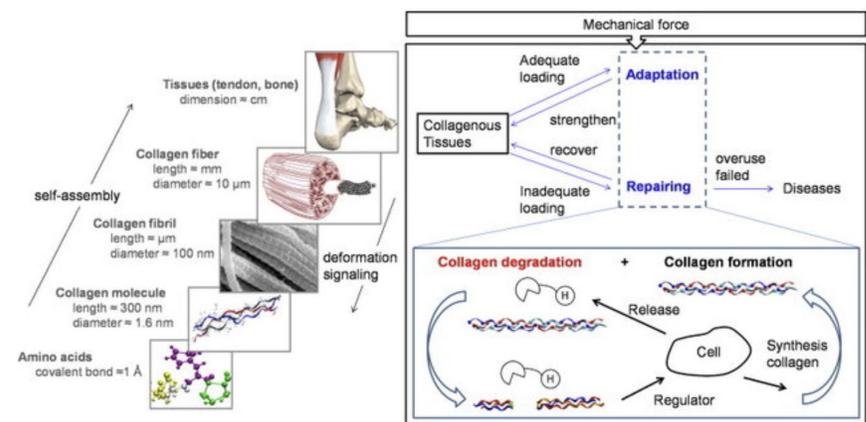


- Primary structural protein in tendon, ligament, skin & bone (30% of all body proteins)
- Incomplete protein (lacks tryptophane, cysteine); low EAA necessary for MPS
  - ✓ High in glycine, proline, hydroxyproline, hydroxylysine, arginine – molecules found in collagen
- Goal: hydrolyzed collagen derivatives (e.g., peptides, AA), are used to increase collagen (COL) synthesis in the body to help speed repair of exercise-induced damage of collagenous tissues (connective tissue remodeling including of ECM\*) [Ref](#)
- Proposed rationale: increasing precursor AA to augment COL synthesis to support growth/repair in target tissues such as ligament, tendon, fascia, cartilage, bone, muscle ECM\*, etc.; [Ref1](#), [Ref2](#) analogous to supplementing complete proteins/EAA in muscle fiber recovery/strength/size from exercise
  - ✓ Adaptations would be not necessarily be muscle cells, but structural components of muscle tissue surrounding cells



COL Breakdown/Synthesis in Exercise

Precursor AA



\*Structurally, the extracellular matrix (ECM) of skeletal muscle (SM) consists of different collagens, integrins, proteoglycans and glycoproteins, which together form a complex architectural network designed to transmit myofibrillar forces throughout the muscle fiber and provide structural integrity. COL is primary molecule in the ECM, which also helps cells to bind together and regulates cellular functions, such as adhesion, migration, proliferation, and differentiation and adapts with training. COL supplementation may enhance COL synthesis within the ECM.

# WHAT IS COLLAGEN (COL) & HOW ARE COL SUPPLEMENTS (COLS) IN EXERCISERS/ATHLETES (GELATIN HAS SIMILAR AA PROFILE)



- Some evidence to support use (15gm/d) in recovery from specific activities that severely challenge connective tissues (e.g., jumping, fast direction changes, etc.) and attenuate performance decrements possibly reducing risk of injuries\*
  - ✓ Higher number of collagenous proteins upregulated in more pathways than placebo – i.e., beyond strength or size
  - ✓ Increased circulating levels of the N-terminal peptide of procollagen (PINP – collagen synthesis biomarker) indicates increases in collagen synthesis
- Studies equivocal for COLS to improve collagenous tissue recovery/synthesis, but lean toward efficacy when:
  - ✓ 15-20gms/d using hydrolyzed collagen peptides >12weeks
  - ✓ No consistent dosage timing but before and/or after exercise may be best
  - ✓ Used in challenging jumping and running change of direction activities (reactive power of tendons)
  - ✓ Possibly more effective with vitamin C supplementation and athletes with joint weaknesses/instabilities
- Argument: would adequate daily protein including WPS before/after exercise offer the same connective tissue recovery as COLS, since the primary collagenous AA are NEAA (de novo synthesis) and supplied by complete proteins. Therefore, **individual diets may be the primary factor in determining efficacy.**
  - ✓ Could one or the other give you the best of both worlds is probably dependent on diet



## What to do

Current Research suggests the possibility to nutritionally support collagen synthesis (as complete proteins/EAA's support MPS) to enhance the growth and/or repair of connective tissues using derivatives of collagen proteins since they contain high levels of the AAs found in collagenous tissues including di and tripeptides. Hydrolyzed collagen would be choice of supplementation, especially if timing of delivery were important.

**If you are competitive athlete participating in reactive power movements that increase the risk connective tissue injury (e.g., football, basketball, etc.), have musculoskeletal weaknesses or minor joint pain, adding 15gm/d of collagen peptides to your supplement program to possibly enhance COL synthesis to help speed repair of regular exercise-induced damage of collagenous tissues, has no downside and might be beneficial in helping prevent injury. Efficacy could be diet dependent**

### Note

Obvious reasoning for not using COLS for Maximizing MPS in exercise:  
 WP has a digestible indispensable AA score of 1.09 and COL has one of 0 because it lacks tryptophan. Even with supplemental tryptophan added, COLS are low in methionine and leucine and total EAA content per gram, thus inferior in stimulating MPS at any time point [Ref](#)

TABLE 1 Amino acid composition of protein supplements<sup>1</sup>

	WP supplement	CP supplement
Alanine	1.7	3.1
Arginine	0.9	2.6
Aspartic acid	3.8	2.0
Cysteine	1.2	0
Glutamic acid	5.3	3
Glycine	0.5	8.0
Histidine	0.6	0.4
Proline	1.4	4.5
Serine	1.4	1.2
Tyrosine	1.3	0.3
Tryptophan	0.7	0
Isoleucine	1.9	0.5
Leucine	4.3	0.9
Lysine	3.4	1.3
Methionine	0.7	0.4
Phenylalanine	1.1	0.7
Threonine	1.6	0.6
Valine	1.7	0.8
ΣEAA's	15.4	5.6
ΣNEAA's	17.9	24.7

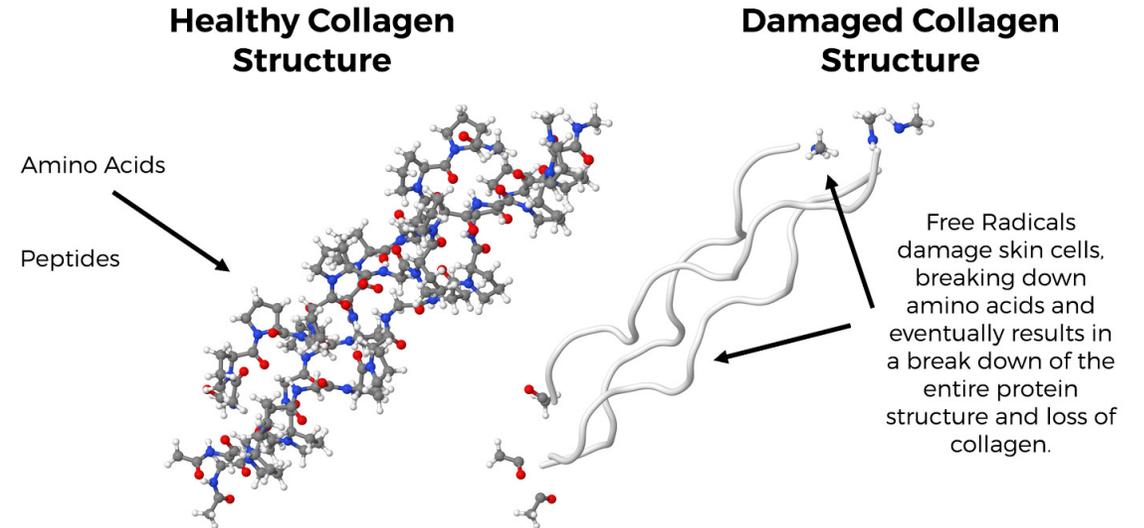
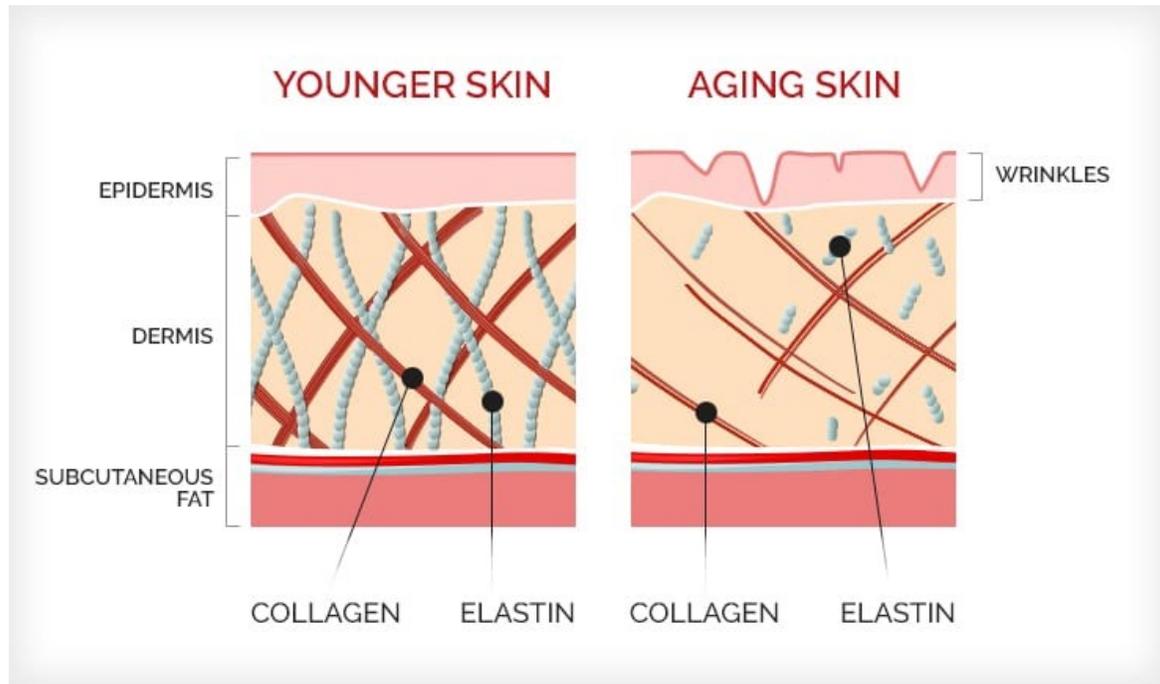
<sup>1</sup>Values are grams per serving. CP, collagen peptide; EAA, essential amino acid; NEAA, nonessential amino acid; WP, whey protein; Σ, sum of.

# COLLAGEN SUPPLEMENTATION AND SKIN HEALTH



**Goal:** replace natural collagen losses with aging

**Rationale:** humans lose ~1% of collagen per year starting in mid-20s and lose up to 30% during the first 5 years of menopause. Therefore, people use collagen supplements to support aging skin



Unless you are deficient in the AAs that make up skin collagen, COLS will do little if anything to reverse/alter the age-related decline



## Published Studies

**Studies have** evaluated COLS on skin aging and revealed some interventions improved skin aging parameters. Preliminary results demonstrated some value in short and long-term use of oral collagen supplements for wound healing and skin aging (3-10gm/d). In some subjects, oral collagen supplements were reported to increase skin elasticity (roughness and wrinkles), hydration, and dermal collagen density. COLS is generally safe with no reported adverse events

### Mainstream science/dermatology view:

Humans make less and break down more COL as they age. Taking in COLS won't deliver intact COL to your skin nor can you direct the AAs from ingested the collagen to build more collagen in your skin. The problem is not that the skin is deficient in collagen's building materials, it's that the machinery to build collagen doesn't work as well as we get older. Unless the diet is deficient, loading up on more amino acids by taking collagen supplements is not likely to do anything.

## Photoaging

**Skin aging caused by exposure to UV radiations, and responsible for over 90 percent of aging in human skin, can be controlled and treated.**

Epub 2020 May 21. **Collagen supplementation for skin health: A mechanistic systematic review** [Meisam Barat](#)

Choi FD, Sung CT, Juhasz ML, Mesinkovsk NA. Oral Collagen Supplementation: A Systematic Review of Dermatological Applications. J Drugs Dermatol. 2019 Jan 1;18(1):9-16. PMID: 30681787.

# SKIN HEALTH – CONTROLLING PHOTOAGING



1. Avoid direct sunlight as much as possible, use sunscreen
2. Protect skin damage from the inside out by consuming a healthy diet, stay active and maintain healthy weight
3. Proper dietary support to bridge the food gap, between levels of VMs and other bio-actives\* delivered in foods and the proper recommended amounts, to allow the body to upregulate all systems including the body's largest organ – the skin, to help preserve youthful skin and minimize aging damage
  - Complete MVM: supply all collagen synthesis co-factors to maximize available COL synthesis
  - \*Carotenoids (lycopene, lutein, zeaxanthin and astaxanthin): naturally found in skin/eyes to protect humans from harmful effects of ultraviolet radiation. Protective effects include direct light-absorbing and antioxidant properties, and regulation of ultraviolet light induced gene expression, mitigating environmental insults to human skin, including photo-aging
  - 1gm/protein/lb/LBM/daily to supply all necessary AAs for all goals and body systems
  - Type II collagen and collagen fragments (as found in JFS) have been micronized to enable passage through the intestines intact and act as a signal to stimulate fibroblast cells in the dermal layer of the skin to increase overall extracellular matrix formation. By doing so, both hyaluronic acid and BioCell Collagen can influence the skin's collagen metabolism from inside, resulting in fewer wrinkles, improved skin elasticity and texture
    - Triggers natural synthesis rather than suppling the constituent AAs that are probably already in the body

## Complete Health/Longevity, Including Joint and Skin, Dietary Support Program

### Daily\*:

- **Target Daily Multivitamin & Mineral (including high vitamin C&D)**
- **Superior Antioxidant** [SuperiorAntioxidant](#)
  - Take 1 daily anytime with a meal
- **UltraProbiotic** [UltraProbiotic](#)
  - Take one daily with a meal

### As needed:

- **Favorite dotFIT Protein Mix**
  - Use as directed to make sure you get ~1gm of protein per pound of LBM (or weight if not overweight) daily from all sources divided 4-5 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
- **Super Calcium** [SuperCalcium+](#)
  - Use if you do not meet the daily needs of calcium (~1000-1200 mgs) from food intake
    - Females take 1 or 2 daily with meals; if you need to take 2, take one with AM meal and the 2<sup>nd</sup> with PM meal; **Males take 1 only if necessary**
- **Super Omega 3** [SuperOmega-3 Fish Oils](#)
  - Take 1-2 daily with meal if not consuming ~2-4 servings per week of fatty fish (take 2 if consuming <1svg)
- **Joint Flexibility Plus™ (Biocell Collagen II)** [JointFlexPlus](#)
  - Support skin health; Injury or age-related joint discomfort take 1-2 in AM & 1-2 in PM
- **\*Advanced Brain Health (may divide evenly or all at once anytime with or without meals)**
  - 45-55yrs take 4; 56+ take 8

## Sport, Health, Activity Recovery & Performance (Level 3 -Max Health & Recovery) Program

(Links will take you to a product "Overview")

### Daily:

- **ActiveMV** <https://www.dotfit.com/ActiveMV>
  - Take 2 daily, one with AM meal and one with PM meal
- **SuperiorAntioxidant** <https://www.dotfit.com/superior-antioxidant>
  - Take 1 daily anytime with a meal
- **UltraProbiotic** <https://www.dotfit.com/UltraProbiotic>
  - Take one daily with a meal
- **MuscleDefender (Glutamine)** [MuscleDefender](#)
  - 1-scoop before & 1-immediately following workout (may mix with AB), 1-scoop before bed
  - Non-training days take 1-scoop in the AM and one in PM

### Daily as needed:

- **FirstString** <https://www.dotfit.com/FirstString-Chocolate>, vanilla; or **WheySmooth (depending on daily calories for body composition goal)** <https://www.dotfit.com/WheySmooth-Chocolate>, vanilla or unflavored
  - 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** <https://www.dotfit.com/super-calcium> (**read all food and shake labels**)
  - 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 2<sup>nd</sup> with PM meal; Males take 1 only if necessary
- **SuperOmega-3** <https://www.dotfit.com/superomega>
  - Take 2 daily with meal if not consuming 2-4 servings per week of fatty fish
- **JointFlexPlus (Biocell Collagen II)**
  - Injury or age-related joint discomfort take 1-2 in AM & 1-2 in PM

### Workout days

- **AminoBoostXXL (AB)** <https://www.dotfit.com/aminoboostxxl-lemonade>, Blue Raspberry, watermelon and Vegan Tropical Colada
  - Take 1.5-scoop ~5-10min before and may continue to drink during activity/workout
  - Take 1 scoop immediately following workout/activity
- **FirstString or WheySmooth\* use as directed to get:**
  - 25-35gm/protein 30-40min before workout & repeat same dose ~30min after post exercise AB dose
- **MuscleDefender (Glutamine)**
  - 1-scoop before & 1-immediately following workout (may mix with AB), 1-scoop before bed

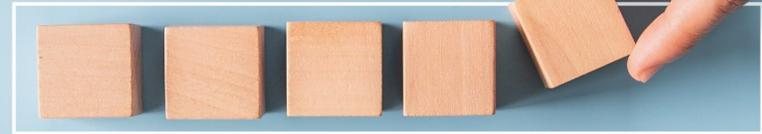
**\*May substitute favorite dotFIT Nutrition High Protein Bar based on venue convenience**

# New Years Resolutions

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*I'm Going to Offer One for You to Make – and Be There as You Deliver*

2020



2021

LOADING...

# New Years Resolutions People Just Can't Resolve

## Top 10 Resolutions

1. Diet or eat healthier (71%)
2. Exercise more (65%)
3. Lose weight (54%)
4. Save more and spend less (32%)
5. Learn a new skill or hobby (26%)
6. Quit smoking (21%)
7. Read more (17%)
8. Find another job (16%)
9. Drink less alcohol (15%)
10. Spend more time with family and friends (13%)

## Top 10 Broken Resolutions

1. Lose Weight and Get Fit
2. Quit Smoking
3. Learn Something New
4. Eat Healthier and Diet
5. Get Out of Debt and Save Money
6. Spend More Time with Family
7. Travel to New Places
8. Be Less Stressed
9. Volunteer
10. Drink Less

# NUTRITION IS THE BASIS FOR EVERYTHING HUMAN - IT CREATES LIFE, SUSTAINS IT, AND MANIFESTS AS YOUR BODY COMPOSITION



## New Year's Goals and Success

- ~50% of adults make New Year's resolutions (NYR)
  - ✓ More than half give up before end of March.
  - ✓ Over 90% will have ditched the resolution before the end of the year.
- The most popular NYRs: lose weight, exercise more and eat healthier, which validates the failure statistics since each year the population in whole, is fatter and more unhealthy

## Nutrition Is The Basis For All These Failures

- Weight loss can only be accomplished with proper food intake
- Exercise can't make the body change fast enough to stay with it
- Eating healthy is misinterpreted, and there are too many wonderful palatable choices to stick to a plan

## You cannot make a difference (or save the world) with fitness, if you don't include nutrition

- Nutrition is something everyone will sign up for if you present it properly
- The right program can change the body in 1-day, thus offering the best chance of making someone want to go to the next - and eventually establish an addiction to fitness

# So, I am Now Offering you a One & Only New Years Resolution

## – So you Can be The Resolver for Everyone Else

*Make a Commitment to Nutrition for 2021 and Incorporate the 4Es to Succeed in your Resolution*

- Introduce every client to your program (also willing family members)
  - Make it compelling so that at least 75% start it, with you setting it up
- Achieve at least a 50% success rate of clients completing a 6-12week program (offer something special up front for all finishers). Success being the following:
  - At least 1-month of logging food to proper calorie average
    - Their diet or yours, but stop at the daily goal number – flexible on their terms
  - Enter measurements weekly & use auto feedback to keep them on goal
  - Start and maintain use of at least baseline dietary support to accelerate results and most importantly immediately improve health and energy
- At least 75% of finishers achieving the body composition goal
  - Mindful that anyone that finishes is a winner and resolved

# 4-Es of a Self-Made Approach to Career – No Limits

Let's apply these to the nutrition New Year's resolution (Goal)

- **EDUCATE** - learn something new every day and apply it to your field
  - Got smarter - *and* - work remained a hobby - not a job
- **EXECUTE** – hold accountable to the vision/mission without “distraction”
  - Out-perform everyone- Set mission goals/milestones (1&5yr career/personal)
  - Surround with people with same self-interests to execute - and measure to.....
- **EXEMPLIFY** - lead by example. Whatever your selling, you better believe it – *passion shows through as truth*
  - Walk the talk -wear your brand
- **EVOLVE** – get better - be ahead of what's next but stay evidence-based & unique
  - Stay pure in your plight to be best & *keep evolving that legacy – because if you.....*

Care About Others & They'll Care About You

# EDUCATE

*Learn something important every* day that you can apply directly

- Use the program daily
- Study the baseline supplement recommendation and its benefits
  - MVM, Protein, Omega – Play-Span vs Lifespan
- Pick a supplement to study in the PDSRG
- Pick one nutrition topic a week to review from the website that supports your clients
- Attend our live webinars or replay them

# EXEMPLIFY

## *Lead by example*

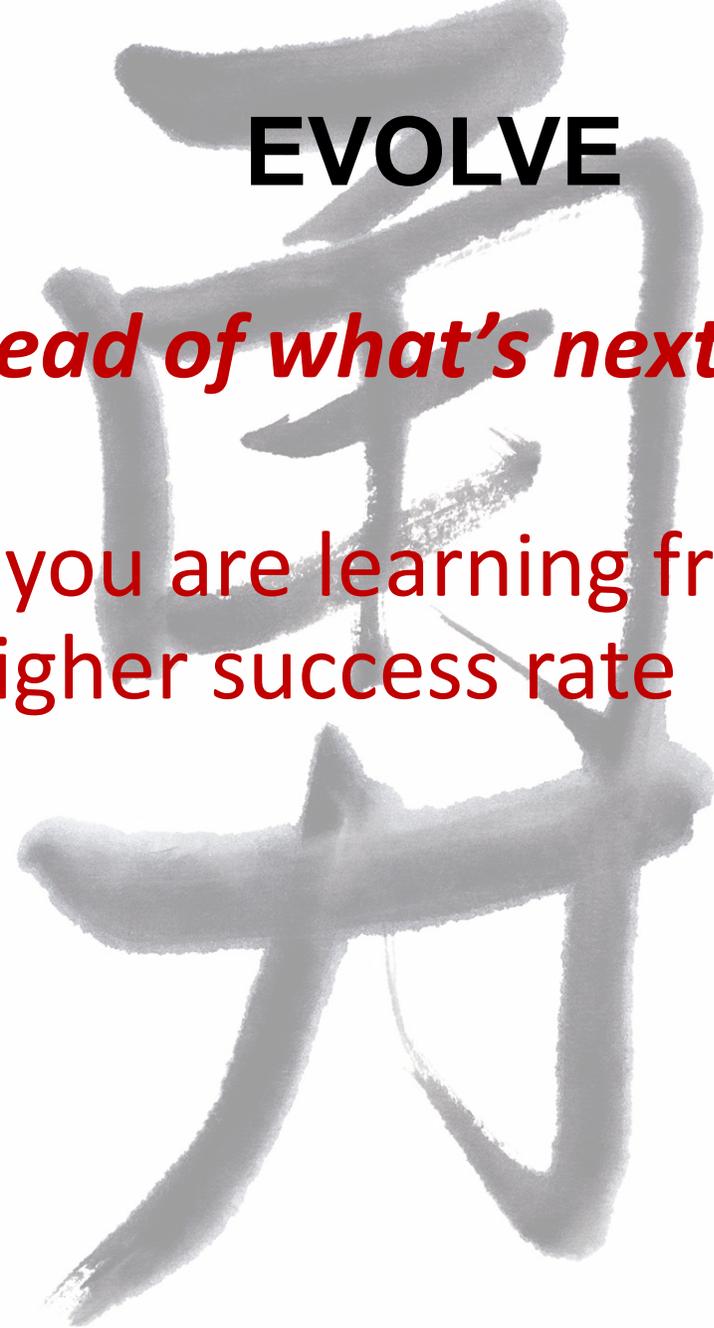
- Don't just know your subject – live it
- Feel and see the difference
- This will pass to the client and everyone in your orbit

# EXECUTE

***Be accountable to your mission plan without “distraction”***

- Set goals for your nutrition study and client’s success





# EVOLVE

- *Get better - be ahead of what's next but stay evidence-based & unique*
  - Integrate what you are learning from your clients to help you achieve a higher success rate

## **4-Es – Summary**

***Execute the Edu & Evolve with it to be Better  
Be your Product, Don't get Complacent & stay Positive***

***While you may not be able  
to always guarantee success, you  
can guarantee how hard  
you work for it and good things naturally happen***

***–it's not about toughness – It's about strength***

# PROPER NUTRITION SUPPORTS THE PREVENTION BEFORE CURE APPROACH



- Although I picked the gym as the perfect physical resource, you don't need the gym to deliver nutrition
  - ✓ Spent a lifetime and fortune getting simple nutrition planning in our scope of practice preparing all of you for this very moment in human existence
- We've had 11 viral epidemics this century (and a catastrophic pandemic). The reality is there will be more. Vaccines, by their nature, are reactive, nutrition is proactive
- Keeping the immune system strong, which is 100% nutrition dependent, is the most critical part of any anti-viral strategy
- Medical professionals who avoid nutrition recommendations in prevention, and as an adjunct treatment, should be considered medically negligent
- When you deliver non-clinical nutrition, fitness becomes the primary preventative side of a true healthcare model, as opposed to the "disease care" model we are currently experiencing.
- We offer hope with the **prevention before cure approach, with the added benefit of shaping your body the way you want it to look or perform!**

# Healthcare or Disease Care



You can work with my staff now  
**Prevention Before**

Or their staff later  
**Cure Approach**

# NUTRITION - JUST DO IT

You must eat anyway – so let's make it fit the goal



Heart Healthy



Lactose Free



Healthy Fast Food



Vegetarian



40/30/30



Standard



Night out



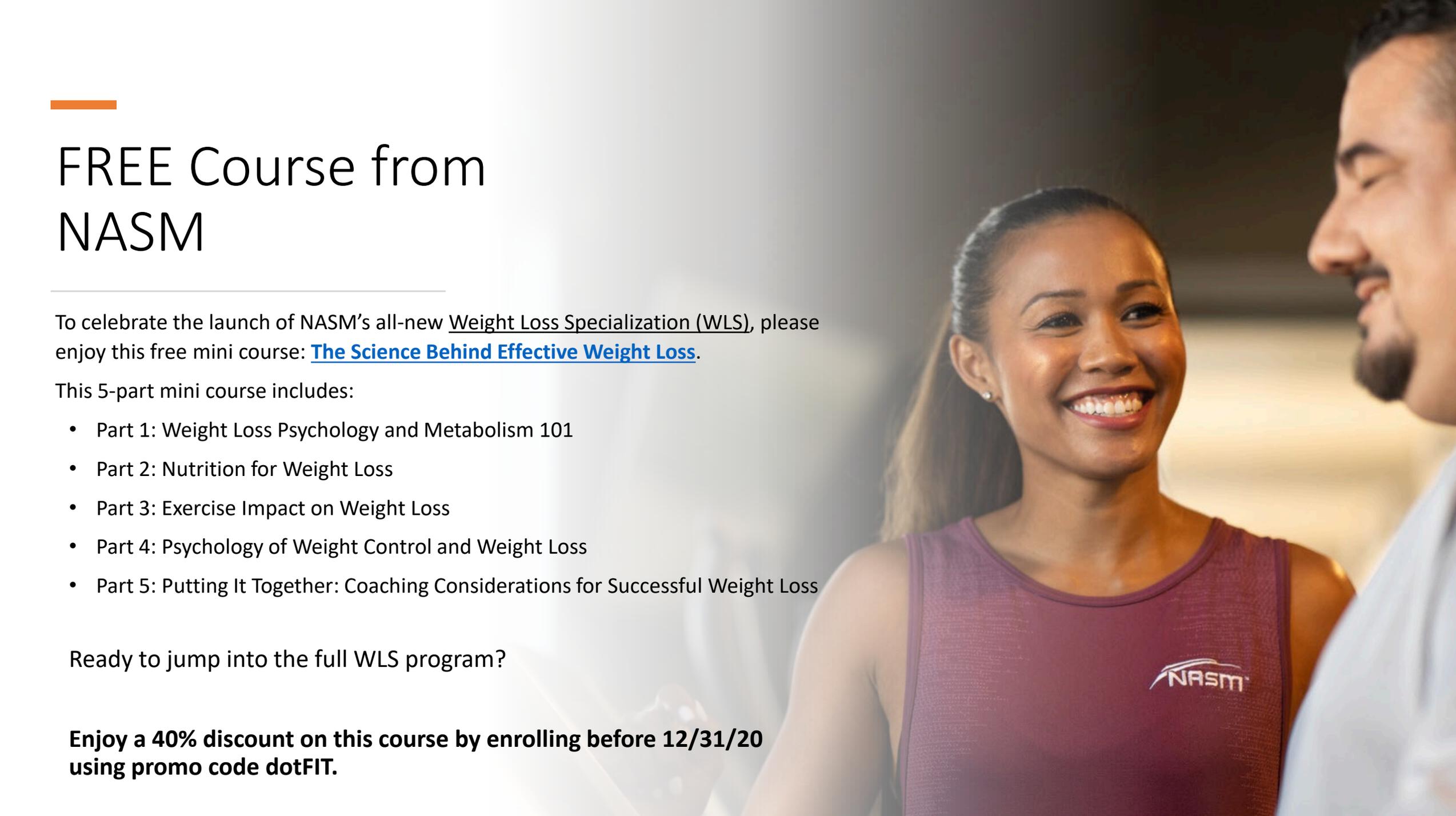
Athletic Performance

Let's bury 2020 and change the paradigm for 2021

Prevention Before Cure



LET'S DO THIS



# FREE Course from NASM

To celebrate the launch of NASM's all-new Weight Loss Specialization (WLS), please enjoy this free mini course: [The Science Behind Effective Weight Loss](#).

This 5-part mini course includes:

- Part 1: Weight Loss Psychology and Metabolism 101
- Part 2: Nutrition for Weight Loss
- Part 3: Exercise Impact on Weight Loss
- Part 4: Psychology of Weight Control and Weight Loss
- Part 5: Putting It Together: Coaching Considerations for Successful Weight Loss

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**Enjoy a 40% discount on this course by enrolling before 12/31/20 using promo code dotFIT.**

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