Bayesian Bodybuilding

Science. Logic. Data. This is Bodybuilding 2.0

Bayesian PT course contents 2019

Nutrition module

Do-it-yourself science & Bayesian reasoning

Optimizing macros: protein intake

Optimizing macros: carbohydrate intake

Optimizing macros: fat intake

Customizing the diet to an individual, including carb tolerance testing

Ketogenic dieting: a complete overview

Human metabolism

- What is energy? Thermodyamics and energy balance
- Determinants of energy expenditure, refeeds, set-point theory, metabolic damage, adaptive thermogenesis, reverse dieting and the yo-yo effect

Optimizing caloric intake: cutting, bulking and body recomposition

- Cut or bulk?
- Tracking progress
- Weight vs. body composition
- How to measure body fat percentage
- How to track your macros

Nutrient timing I

- Intermittent fasting & alternate day fasting
- Meal frequency
- Circadian rhythm effects

Nutrient timing II

- Fasted training
- Workout nutrition and the anabolic window

Nutrition case studies and Q&As

Client compliance and program adherence: the psychology of how to stick to your diet and exercise program

- Psychological effects of nutrition
- Goal setting
- Client empowerment
- Cheat meals
- Food cravings
- Assessing client adherence and motivation

Ad libitum dieting: how to lose fat and gain muscle without tracking your macros

Health science and food choices

- What makes a diet healthy?
- Effects of food processing
- Organic food
- Cholesterol
- Saturated fat
- Low calorie sweeteners, sugar and dietary fiber
- Food choices for health and anabolism

Beauty

- Tanning
- Acne
- Hair loss
- Cellulite
- Dandruff

Training module

- Understanding how muscle grows
  - Neural and morphological adaptations to strength training
  - Mechanisms of muscle growth
  - Strength vs. size
  - Sarcoplasmic hypertrophy
- Cardio for fat loss
- Optimal training program design: volume, frequency and intensity
- Interindividual variability: why there's no one-size-fits-all program
  - Autoregulation & muscle-specific hypertrophy
  - Work capacity
  - Gender specific programming: including contraception, pregnancy, the menstrual cycle and other female specific topics
  - Age specific programming: the elderly and youth
- The fitness lifestyle
  - Circadian rhythm control
  - Optimizing sleep quality
  - Stress management
- Optimizing your exercise selection
  - Accommodating resistance: biomechanics, bands and chains
  - Exercise selection reference list
  - Counting volume: how much does a certain exercise stimulate a certain muscle?
  - Training in a home gym
- Repetition tempo
- Exercise technique
  - Internal vs. external cueing
  - The mind-muscle connection

- Rest intervals
    - Active recovery
- Optimizing your exercise ordering
    - Circuit training, (antagonistic) supersets and paired sets
- Advanced training techniques for muscle hypertrophy
    - Training to failure, forced reps and drop sets
    - RPEs and autoregulation
    - Reverse pyramiding, cluster sets and myo-reps
    - Weighted stretching
    - Eccentric emphasized training/eccentric overloading
    - Post-activation potentiation
    - KAATSU/blood flow restriction training
- Periodization and progression
    - Cybernetic/autoregulatory, undulating and linear periodization
    - Benchmarking and autoregulation
    - What is fatigue?
    - Overtraining, overreaching and deloading
    - Autoregulatory Volume Training and Reactive Deloading
- Training program case studies and Q&A
- Injury management and flexibility training
    - Injury diagnosis, treatment and active recovery
    - Pain science
    - Ice vs. heat, NSAIDs and RICE
    - Rehabilitative equipment: braces, sleeves, tape, etc.
    - Stretching
    - Foam rolling and massage