

FALL EOC STUDY GUIDE

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The FITT Principle Involves

- A. How often you work out (Frequency)
- B. How hard you work out (Intensity)
- C. How long you work out (Time)
- D. Kind of work out you do (Type)

[Learn More](#)

Overload Principle

The principle of overload states that a greater than normal stress or load on the body is required for training adaptation to take place. The body will adapt to this stimulus. Once the body has adapted then a different stimulus is required to continue the change. **In order for a muscle (including the heart) to increase strength, it must be gradually stressed by working against a load greater than it is used to. To increase endurance, muscles must work for a longer period of time than they are used to.** If this stress is removed or decreased there will be a decrease in that particular component of fitness. A normal amount of exercise will maintain the current fitness level.

[Learn More](#)

Specificity Principle

- Definition: Specificity is the principle of training that states that sports training should be relevant and appropriate to the sport for which the individual is training in order to produce a training effect.
- The Specificity Principle simply states that training must go from highly general training to highly specific training. **The principle of Specificity also implies that to become better at a particular exercise or skill, you must perform that exercise or skill.** To be a good cyclist, you must cycle. The point to take away is that a runner should train by running and a swimmer should train by swimming.
- [Learn More](#)

Principle of Progression

- **The Principle of Progression implies that there is an optimal level of overload that should be achieved, and an optimal time frame for this overload to occur.**

Overload should not be increased too slowly or improvement is unlikely. Overload that is increased too rapidly will result in injury or muscle damage. Exercising above the target zone is counterproductive and can be dangerous. For example, the weekend athlete who exercises vigorously only on weekends does not exercise often enough, and so violates the principle of progression.

- [Learn More](#)

What is an “Ergogenic Aid”?

- A product that *claims* to improve sport performance or weight loss.



Creatine



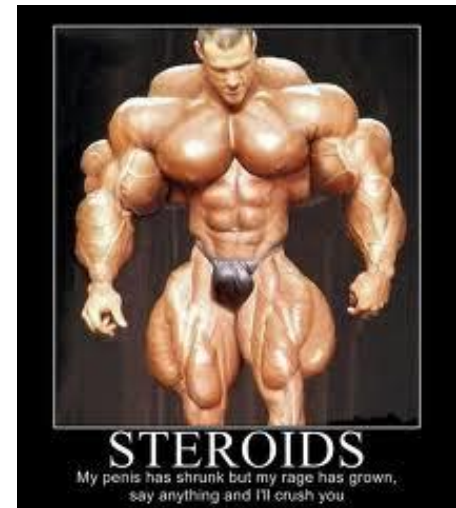
Ergogenic Aid: Supplements

Could be Beneficial:

- Healthy Shakes
- Carb Loading
- Sport Drinks in Moderation
- Protein Shakes – maybe, read the labels

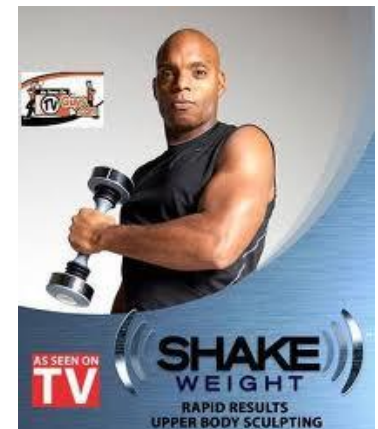
Could Be Harmful:

- Steroids
- Diet Pills
- Energy Drinks (ex. Red Bull)
- Blood Doping (Lance Armstrong)
- Caffeine



Watch for False Advertising!

- Some products are helpful...but many companies try to sell you things for weight loss and sport performance....watch for things that DON'T WORK or are even DANGEROUS!



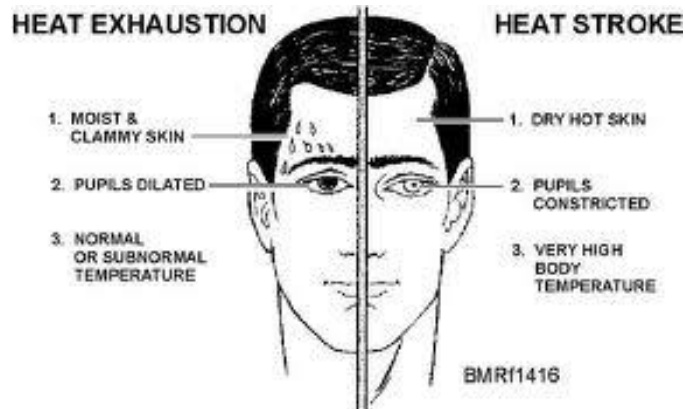
How to spot a health scam:

1. Recommendations that promise a quick fix
2. Claims that sound too good to be true
3. Simple conclusions drawn from a complex study
4. Recommendation based upon a single study
5. Dramatic statements that are refuted by a reputable scientific organization
6. Recommendations based upon studies without peer review
7. Recommendations based upon studies that ignore differences among individuals or groups
8. Dire warnings of danger from a single product
9. Lists of "good" and "bad" foods
10. Recommendations made to help sell a product, or by the manufacturer itself

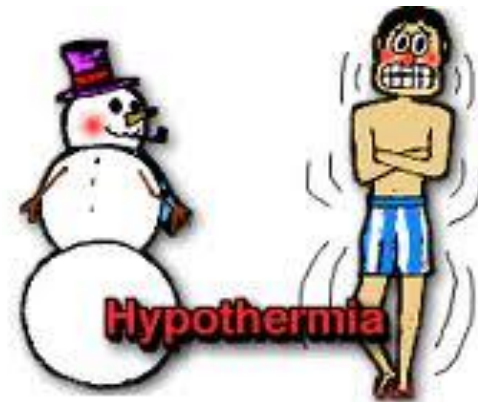
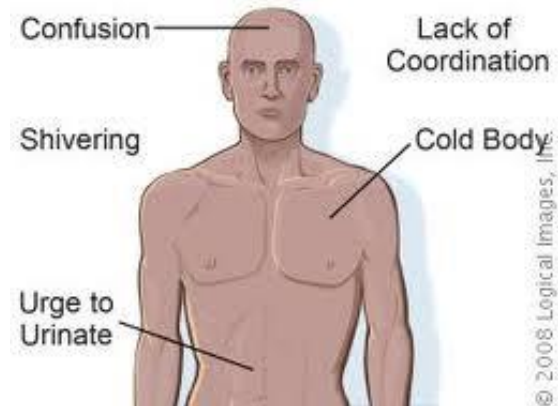
[Learn More](#)

How to tell the difference? Hyper = extra (think hyper-active), Hypo = low

Hyperthermia

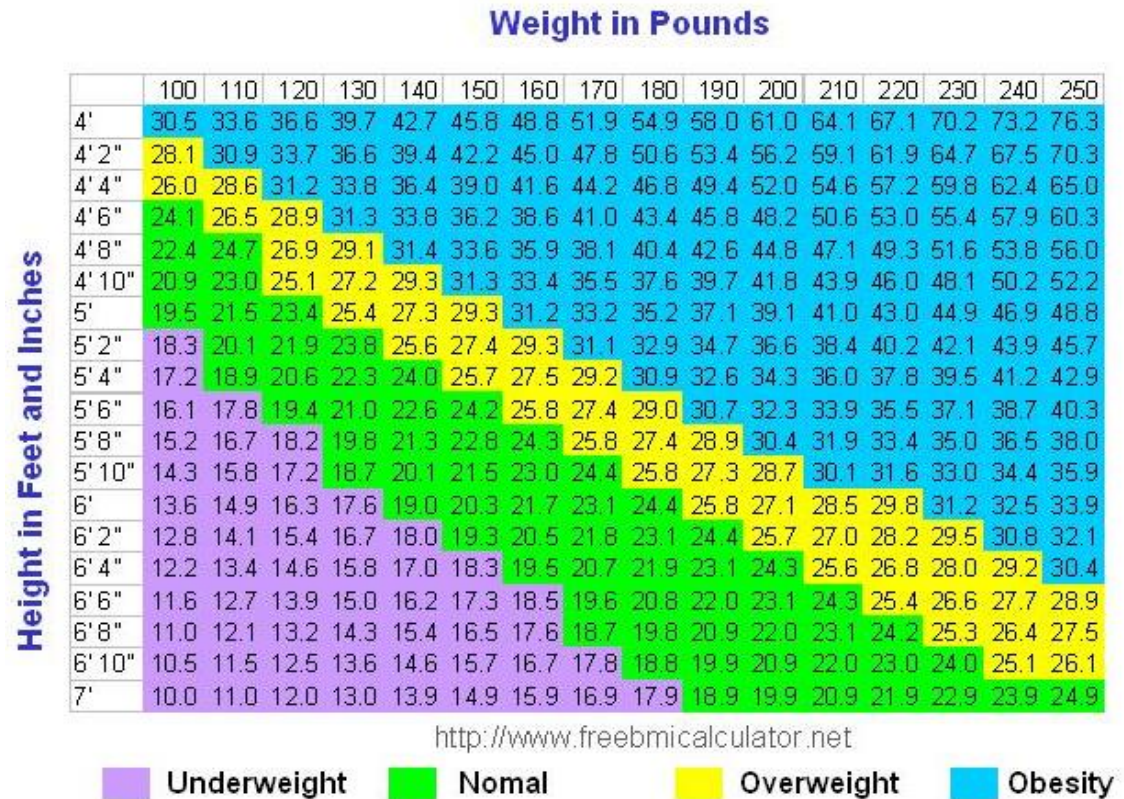


Hypothermia

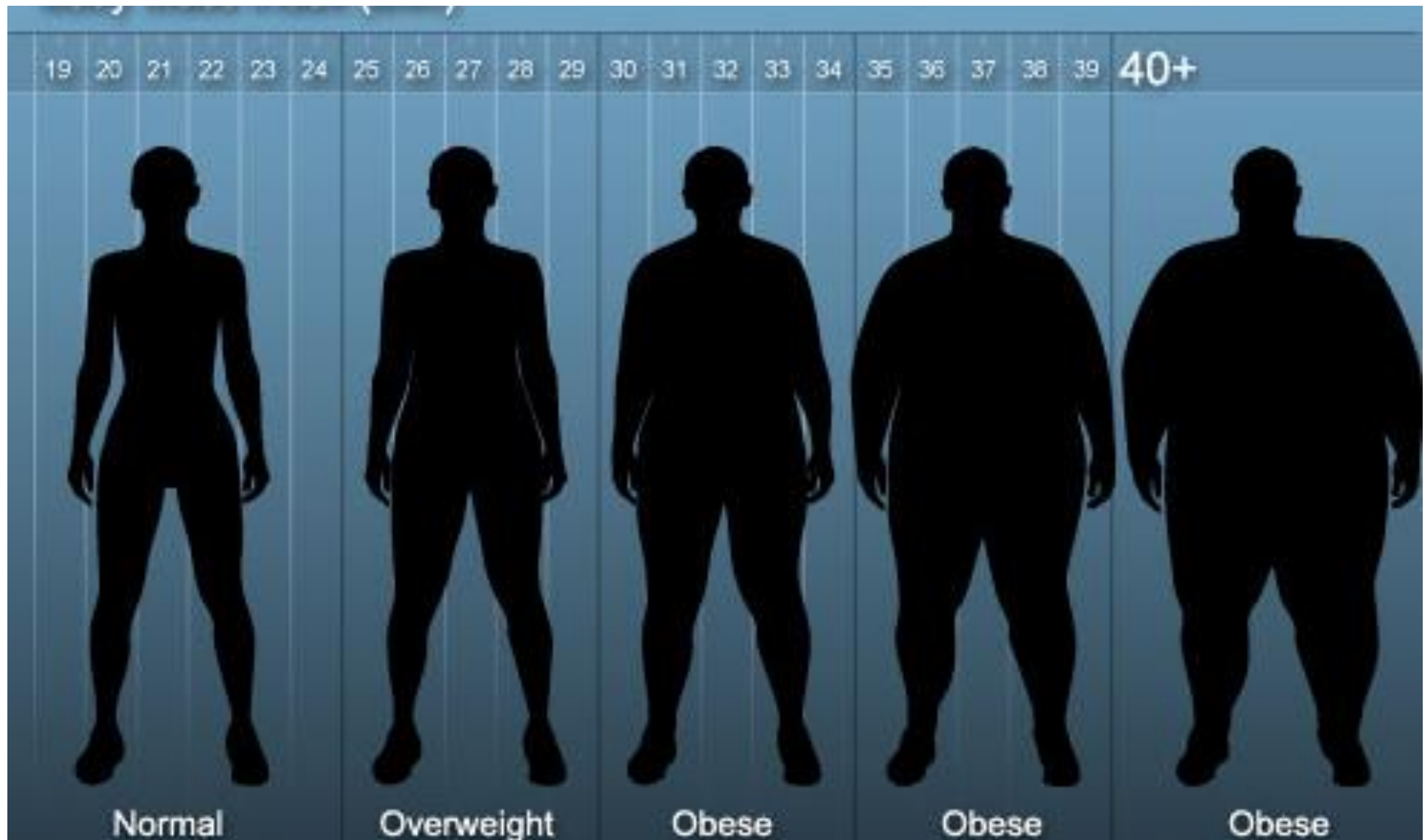


What is BMI?

- BMI uses **HEIGHT** and **WEIGHT** to estimate Body Fat.
- BMI Score is used in the Fitnessgram to determine the Healthy Fitness Zone for body composition.



What do BMI Numbers Indicate?



BMI Resources

[Free BMI Calculator](#)

[Fitnessgram BMI Standards \(HFZ\)](#)

BMI Score	21	22	23	24	25	26	27	28	29	30	31
4'10"	100	105	110	115	119	124	129	134	138	143	148
5'0"	107	112	118	123	128	133	138	143	148	153	158
5'1"	111	116	122	127	132	137	143	148	153	158	164
5'3"	118	124	130	135	141	146	152	158	163	169	175
5'5"	126	132	138	144	150	156	162	168	174	180	186
5'7"	134	140	146	153	159	166	172	178	185	191	198
5'9"	142	149	155	162	169	176	182	189	196	203	209
6'0"	150	157	165	172	179	186	193	200	208	215	222
6'1"	159	166	174	182	189	197	204	212	219	227	235
6'3"	168	176	184	192	200	208	216	224	232	240	248

V02 Max: What is it?

- Fitness can be measured by how much oxygen you can use while exercising.
- The more fit you are, the better your body can use oxygen.
- [Learn More](#)



VO2 Max: Which Fitnessgram Tests?

- Mile Walk (need a heart rate monitor so you can know what your heart rate is when you finish).
- PACERs
- [Fitnessgram Zone Charts](#)



Why is VO2 Max Important?

- Students with a larger mass (BMI) have to use more oxygen to score in the fitness zone.
- Students with a higher BMI have to run MORE PACERS or RUN A FASTER MILE than a person with a lower BMI.
- [Fitnessgram Aerobic Capacity Look-Up Tables](#)
- Tip: download PacerCalc to see how many Pacers or how fast you need to run the mile to pass Fitnessgram.



View In iTunes

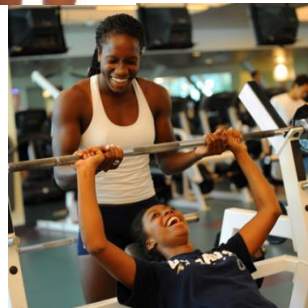
+ This app is designed for both iPhone and iPad

\$0.99

Which Type of Strength Program Should I Do?

Tone and Lose Fat

- Light Weight
- High Reps
- High Intensity



Increase Muscular Strength and/or Size

- Increasingly Heavy Weights
- Low – Medium Reps
- High Intensity



Fitness Planning

- Step 1: Identify a goal.
- Step 2: Choose where you want to workout.
- Step 3: Set a weekly schedule
- Step 4: Target whole body (ex. pushing *and* pulling exercises, flexibility).
- Step 5: Use principles of overload, progression and specificity.
- Step 6: Schedule regular cardio and rest.
- Step 7: Eat healthy.

- [Learn More](#)