

*In The Name Of Allah The  
Compassionate The Merciful*






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استادیار و عضو هیئت علمی دانشگاه آزاد اسلامی و گروه تحصیلات تکمیلی دانشگاه الزهرا (س)  
عضو کمیسیون پزشکی کمیته ملی المپیک  
مشاور مرکز علم و ورزش ایران ISSC  
سرپرست دپارتمان طب ورزشی PIRC  
مشاور سازمان ملل متحد دفتر Unicef در پروژه IDD2002  
مشاور تیم های ملی وزنه برداری و قایقرانی  
رئیس کمیته کودکان و نوجوانان IFSAF  
عضو هیئت موسس انجمن تغذیه ورزشی ایران  
عضو کمیته تغذیه و بهداشت فدراسیون پزشکی ورزشی  
مدرس دوره های تخصصی بین المللی وزنه برداری و تکواندو غرب آسیا  
کارشناس برنامه های علم و ورزش صدا و سیما جمهوری اسلامی ایران  
مربی بین المللی رشته ورزشی Power Lifting و کمر بند مشکی دان ۳






# کنترل وزن



# چند نوع وزن وجود دارد؟؟؟

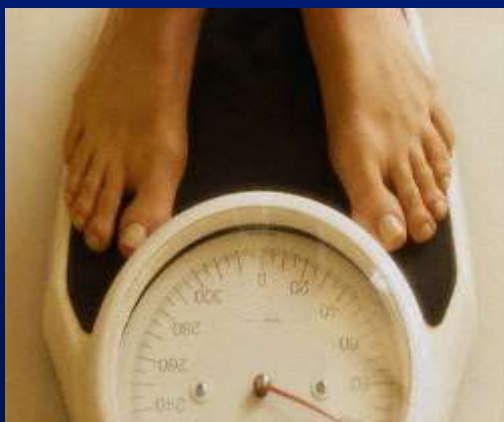
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- OBW: Optimal Body Weight
  - IBW: Ideal Body Weight
  - CBW: Current Body Weight
  - UBW: Usual Body Weight
  - EBW: Event Body Weight

## وزن مطلوب [1] و ایده آل [2]

برای محاسبه وزن ایده آل می توان از فرمول های پیشنهاد شده، استفاده کرد :

OBW : Optimal Body Weight [1]

IBW : Ideal Body Weight [2]



# IBW

● برای مردان:

● به ازای هر ۵/۲ سانتیمتر بالاتر از ۱۵۰ سانتیمتر (برای قد و بعنوان ضریب A ) ، مقدار ۷/۲ کیلوگرم به عدد ۴۸ اضافه شود

$$IBW = 48 + (7/2 \times A) \quad \text{بنابراین}$$

-  $A =$  تفاضل بلندای قامت با عدد ۱۵۰ ؛ تقسیم بر ۵/۲

● برای خانم‌ها:

● به ازای هر ۵/۲ سانتیمتر بالاتر از ۱۵۰ سانتیمتر (برای قد و بعنوان ضریب A ) مقدار ۳/۲ کیلوگرم به عدد ۴۵ اضافه شود

$$IBW = 45 + (3/2 \times A) \quad \text{بنابراین}$$

-  $A =$  تفاضل بلندای قامت با عدد ۱۵۰ ؛ تقسیم بر ۵/۲

● تطبیق نتیجه با اندازه جثه از طریق کم کردن ۱۰ درصد برای جثه‌های کوچک و اضافه کردن ۱۰ درصد برای جثه‌های بزرگ انجام می‌شود، در افراد بالاتر از ۵۰ سال ، ۱۰ درصد نیز به وزن اضافه می‌شود.

- برای مردان:

- به ازای هر ۵/۲ سانتیمتر بلندی قامت بیشتر از ۱۵۷ سانتیمتر (برای قد و بعنوان ضریب B ) مقدار ۴/۱ کیلوگرم به عدد ۶۱ اضافه شود

- بنابراین  $OBW = 61 + (4/1 \times B)$

- تفاضل بلندای قامت با عدد ۱۵۷ ؛ تقسیم بر ۵/۲  $B =$

- برای خانم‌ها:

- به ازای هر ۵/۲ سانتیمتر بالاتر از ۱۵۰ سانتیمتر (برای قد و بعنوان ضریب B ) مقدار ۴/۱ کیلوگرم به عدد ۵۴ اضافه شود

- بنابراین  $OBW = 54 + (4/1 \times B)$

- تفاضل بلندای قامت با عدد ۱۵۰ ؛ تقسیم بر ۵/۲  $B =$

- مطابق توضیحات ارائه شده ؛ ۱۰ درصد کمتر ( برای ریز جثه ) و یا ۱۰ درصد بیشتر ( برای درشت جثه ) منظور شود.



• برای افراد دچار قطع عضو باید تعدیلاتی صورت گیرد؛ لذا وزن تقریبی اعضای قطع شده باید از IBW و OBW کم شود

عضو قطع شده	درصدی که باید کم شود
دست (از مچ به پائین)	۳/۰
دست (از آرنج به پائین)	۶/۲
تمام دست	۲/۶
پا (از مچ به پائین)	۷/۱
پا (از زیر زانو به پائین)	۰/۷
پا (از بالای زانو به پائین)	۰/۱۱
تمام پا	۶/۱۸

## *Facts*

- Balancing energy intake with energy expenditure is the key component of weight control in most Athletes
- Several methods of estimating energy needs have been developed, and the most commonly used are formulas based on height, body weight, age ,sex, and other factors such as general activity level or the presence of physiologic stress.



# Weight Control Definition

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کلینیک طب ورزشی سبز ۲۲۱۷۱۹۶۵-۲۲۴۰۸۰۹۶ مرکز علم و ورزش ایران تلفن: ۸۱۰۴۵۱۹۳-۸۱۰۴۵۱۹۴

# *Aims of Weight Gaining*



**Increase lean body mass through:**

- Well-designed resistance-training program
- Energy-dense, adequate-protein meal plan

# Weight Loss



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کلینیک طب ورزشی سبز ۲۲۱۷۱۹۶۵-۲۲۴۰۸۰۹۶ مرکز علم و ورزش ایران تلفن: ۸۸۰۴۵۱۹۳-۱۰۴۵۱۹۴

- ❌ Lose weight so to qualify for a lower weight class
- ❌ Many will lose pounds by intense diuresis leading to dehydration
- ❌ Dehydration adversely affect performance
- ❌ Increases risk for kidney malfunction, heart problems, & death.



## Wrong Attitudes

- Many Athletes think that the answer to Weight & fat loss comes in the form of an illegal pill, or formula sold at the local sport store.
- Others think that only the muscle heads at the local GYM know the secrets.
- Maybe a crazy diet is the answer?
- It is not True???



## The Right Way

- Gradual reduction in food intake long before competition
- Lower body fat composition



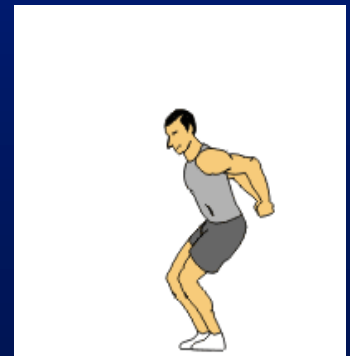


- Weight reduction can be managed through:
  - Diet
  - Exercise
  - Drugs
  - Behavior modification
  - Surgery
  - Combinations

## *Best Way to lose Weight*

Whenever possible, weight loss should employ the **combination** of:

- Low-calorie/low-fat diets
- Increased physical activity
- Behavior modification



- **Drugs should never be used alone.**
- If legal Drugs are necessary, should be used in combination with diet, exercise, & behavior modification only by ordering a sport Physician .



- Medical authorities recommend losing no more than 1 Kg per week.
- When this is done through increased exercise & decreased calorie intake, weight loss will be due primarily to fat loss.
- It may be possible for some athletes to lose a maximum of 2 Kg in a week (without dehydration), but muscle tissue will be lost along with the fat.

- It is not possible to lose weight faster than this without dehydration occurring.
- Losing more than 5% of one's body weight in less than 3-4 days will negatively effect power, muscle endurance, aerobic performance, muscle strength especially in the large muscle groups of the legs, & mental concentration.
- Such weight loss can also decrease the body's ability to cool itself.

- **Water** is the most important nutrient, therefore, the most **dangerous weight loss** practices involve restricting **fluid intake** or otherwise dehydrating the body.
- It is **not possible** to adapt one's body to **dehydration**.
- The **body does not function** more efficiently without water **by forcing** it to go **through repeated bouts of dehydration**.



- The greater the degree of dehydration the poorer one's performance & the greater the risk of health & medical problems.
- Research indicates it is impossible to completely rehydrate the body in less than 24-48 hours.
- The longer the body has been dehydrated, the longer the rehydration process will take.

- Research also indicates water loss due to **diuretics** or **laxatives** takes much longer to replace than water loss due to exercise and this Methods are **DOPING**.
- Also, the use of diuretics & laxatives can cause the body to retain more fluid upon **rehydration**, thus causing a greater weight regain.
- These methods should absolutely be avoided.





- For those individuals involved in weight reduction some experts offer the following advice **to help minimize complications:**
  - 1) DO NOT restrict fluid intake.
  - 2) Reduce bulk-forming foods (such as high-fiber cereals, raw fruits & vegetables) from the diet 1-2 days before weigh-in.

- 4) Immediately after weigh-in, begin rehydrating the body with a glucose / electrolyte replacement fluid or water.
- 5) Remember rehydration takes at least 24-48 hours.
- 6) Chronic weakness, tiredness, or being light-headed may indicate weight loss which is too severe.

- Coaches are asked to follow these guidelines when working with athlete involved in weight reduction:
  - 1) **No athlete should engage** in methods of quick, rapid weight loss.
  - 2) **No coach should encourage athletes to restrict fluid intake.**
  - 3) Every coach should closely monitor athletes losing weight.
  - 4) Every coach should use *body composition testing* as a guideline to **determining safe, minimal weight.**

- Simply divide calories into 5, 6, or 7 small meals.
  - Keeps metabolic rate elevated
  - Maintains blood sugar levels (& insulin)
  - Maintains energy throughout the day
  - Provides small “packets” of macro/micro nutrients throughout the day
  - Lowers cholesterol, prevents heartburn

## *What is the Fat Loss Tips*

- Never skip meals.
- Eat high quality protein that are low in fat. (BV & BA)
- Do not drastically reduce you caloric intake.

- Increase dietary fiber to help satisfy hunger.
- Eat plenty of vegetables throughout the day.
- Avoid processed foods and “snack foods”.
- Bake & broil foods instead of frying.
- Avoid or reduce use of food that have a high fat content.

# Weight Cutting???





# Why Cut Weight?

- many athletes cut their weight down to a lower class only to add weight after the weigh in.
- In the athlete's mind, they are then heavier for the actual fight, and have the potential to be stronger than their opponent (as long as they don't do the exact same thing).



## *Bowel Emptying*

- Two days before the weigh in, an athlete will already be eating less if he has to lose critical pounds.
- The day before the weigh in, he should not be eating much at all and eat CLD (Clear Liquid Diet).
- Or taking the gentle, natural laxative before you go to bed the night before the weigh in,
- Remember that you would only do this if you felt you were not going to make the weight with the methods listed above.



# ● Diuretics???

- Dandelion Root???

## Eating

- while you are cutting weight. You must make sure that your blood sugar levels are normal during this process
- The last thing you want to do is take in fluids with sugar or heavy foods as this point.
- That is why we use a simple Balance Bar to get the job done.
- The bar only weighs a few ounces, but it will give you some sugar and fuel that your body can use during the fluid and food fast.

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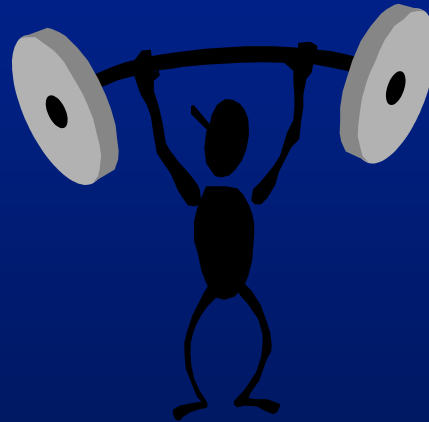
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# Good Luck



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