

# EC CLINICAL AND MEDICAL CASE REPORTS

**Review Article** 

# The Management of Obesity or Fat Layer by Using Advanced Diet; Keto and Essential Supplements L-Arginine, BCAA, CLA, Omega 3, Apple Cider Vinegar, Whey Protein

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#### **Abstract**

There are several myths about obesity management or fat loss program from longer time. In USA every 1/3 Person is suffering obesity due to unhealthy diet follow and other unhealthy food habit like taking to much fast food. In this article we are focusing in natural way how we can manage obesity or remove fat layer from the body. In this article we are focusing keto diet, essential nutrition from food, omega 3, L-Arginine, BCAA (essential three amino acid) in ratio 2:2:1 form, whey protein [fast digest protein] apart from meat, soya protein. Obesity is very dangerous disease itself or we can also triggered a term for obesity a powerhouse of fat that helps to metabolism slow and occurring several serious disease. Such as diabetes, blood pressure [High], Blood Clot, Cholesterol, hormone imbalance, low libido in male, Erectile dysfunction, low testosterone, heart attack, joint pain, vision problem, skin problem, water retention, sickness etc. We have only the way to minimize the fat proper sleep, nutrition, exercise with high intensity highly recommended this is the only way to minimize the severe conditions comes from obesity. In India epidemic range is around 5% of total population and the common age 22 - 38 Male/female.

Keywords: Obesity; Fat Loss; Keto Diet; BCAA; L-Arginine

# **Abbreviation**

CLA: Conjugated Linoleic Acid; BCAA: Branch Chain Amino Acids; KETO: Ketogenic Diet

## Introduction

Obesity is a disease involved excess amount of fat. It is human race problem it is not just cosmetic concern its all about to medical problem that increase risk factor in human beings life. It is noticed due to obesity there are lots of disease chance is possible such as Blood Clot, Cholesterol, hormone imbalance, low libido in male, Erectile dysfunction, low testosterone, heart attack, joint pain, vision problem, skin problem, water retention, sickness, high blood pressure, difficulty in breathing, certain cancers as well. There are several reasons why people difficulty to avoid obesity due to lack of knowledge, daily routine, low nutrition, high calories intake, exercise avoid in result person enter the obese phase. Dietary supplements, food, proper sleep, cardio exercise, high intensity workout will help to loose fat. Weight loss procedure and prescription medications is also a solution as another option. For obesity diagnosed BMI Should be 30 or higher. Also BMI Calculation based on body mass index, weight in pounds, inch of height in meters squared but it vary to vary person for some person BMI Calculate the fat estimate in body for some such as athlete or muscular mass body type may have BMI in obesity category even they don't have fat in their body in table 1 and figure 1 which is clearly mentioned.

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BMI (Body Mass index)	Weight Status
Below 18.5	Underweight
25 - 29	Normal
30+	Obesity
35+ or higher	Massive Obesity

**Table 1:** BMI Index with weight status representation.

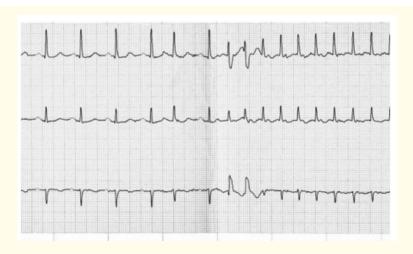


Figure 1: Obesity irregular heart rate BMI Should more 30+.

The epidemic range of obesity in India is 5% of total population. Whereas in USA 1/3 per 1000 candidate. Obesity cases is low record in data especially from region like Japan, China, Taiwan, Malaysia, Africa as well. It is observed that due to obesity sexual illness also occurred and metal problem as well even arthritis is also noticed. the Male individual is lower obese as compared to female individual in figure 2 respectively.



Figure 2: The obesity Individual and unhealthy diet.

#### **Causes**

Obesity cause when an individual taking more calories and his/her metabolism slow due to taking higher calories body start accumulation of fat in layer form. Obesity is sometimes target individual due to genetics, their behavioral, metabolism, hormonal disturbance. Question arise every 1/4 of population sometimes it is noticed that skinny/Rakish Personality Individual taking to much calories but he/she achieved weight gain? The best answer was due to metabolism if the metabolism rate is high there is 90% low chance of fat accumulation in body. Metabolism play great role in obesity or fat loss program like people's preferring green tea, black coffee for weight loss there is no magic remedies everything is depends upon metabolism rate these leaves help to boost metabolism rate so many of candidate achieve their weight loss program. Whenever individual not utilize calories by any physical work it is noticed excess of fat seemed. Americans, Indian, Pakistani diet are to high in calories due to fast food, high caloric beverage even people who have obesity their diet is also advanced level they eat more calories before feeling full, feeling hungry even they eat due to anxiety or stress. Even obesity also happened due to improper diet of all nutrition, vitamin, minerals, micro and macro nutrient also play great role for management of obesity.

#### Risk factors

There are too many factors of obesity which are respectively:

- Family inheritance and influences: Basically genes outcome from parents to offspring the main reason even sometimes it is estimated where fat is store in their parents more probably individual chances similar to their parents genetics also play role how your body convert food into energy in form ATP. How individual appetite, hunger, stamina for burning fat during physical work. It's not all about genetics sometimes it happen due to unhealthy diet habits.
- **Lifestyle choices:** Improper diet, lack of nutrition in macro or micro, high calories intake low metabolic rate, lack of rich vitamin fruits, and liquid beverages they have high calories with sugar that is main reason of obesity after that it converted into diabetes. Late night food intake, in one time to much blot stomach with food these are the some reason behind obesity occurring in the body.
- Certain diseases and medications: In terms of medical disease there are several disease related to syndrome even people have
  arthritis, diabetes, even people taking pills epilepsy, diabetes, antipsychotic drug's, steroids, beta blockers also responsible for
  weight gain if proper duration of diet now following.
- Social and economic issues: This is observed that people are avoiding their obesity, sometimes they procrastinated due to lack of space, equipment they are not able to perform exercise even unhealthy cooking habit even friends and family not taught for exercise these types of habit also influence more person to obesity. Too much oils, too much simple carbohydrates also disturbing a basic diet or balanced diet.
- Age: There is no age of obesity it can occur at any stage of life or age sometimes young children as well. As we discussed earlier in lifestyle Choices portion obesity direct related to diet or metabolism so younger individual have fast metabolism as compared to old individual so this is noticed more chances of obesity is noticed 40+ individual whether they male/female even they done carry this age good muscle mass simple is that like if person have high muscle mass he is fit if person have low muscle mass he/ she may be fat/obese.
- Other factors: Weight gain is common during pregnancy, surgery, imbalance in sleep. After pregnancy women get fat accumulate so best way to minimize that fat feeding baby and proper sleep, diet, low calories, multivitamin capsule highly recommended for management of fat.

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## Management of obesity

Obesity Management should be based upon proper diet, nutrition macro, micro, calories intake, metabolic rate, exercise. For example, a person is 137 Kg his BMI is more than 35+ so that individual consider Massive obesity so here we discussed his daily requirement for weight loss.

#### Formula:

Formula I = Individual Body Weight × 2

= 137 × 2 = 274 Gram Protein Daily Requirement

Hence,

Same as a daily requirement of that individual

274 Gram Protein

30 gram carbohydrates

50 - 70 gram Fat, Vitamin, minerals = full fill macro, micro nutrients.

Those have 30+ BMI Keto Diet, Low Carb Diet highly recommended, Intermediate fasting as well.

The management of obesity first step to full fill all daily nutrients and proper diet first we discussed about natural or Nutraceutical supplements.

#### **Keto diet**

The ketogenic diet is very similar to low carb diet or Atkins in keto diet low carb, high fat, high protein is involved. In this diet carbohydrates should be replaced with fat due to this carb into enter metabolic state which is called Ketosis. Ketosis is the process where body produce ketones apart and break the process of glycogens. Keto Diet main work to store fat utilize as energy and it helps very for fat loss without energy loss in below table 2 respectively. We are targeting some natural foods for ketogenic diet. Please note for ketosis process start in human body it take around 48 hours to 72 hours.

Best natural food for ketogenic diet	
Sea Food; Fish; Salmon; Rohu; Katla	
Cheese	
Avocados	
Meat	
Coconut Oil + Peanut butter	
Plain Greek Yogurt and Cottage Cheese	
Eggs	

Table 2: Top best natural food for ketogenic diet.

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# Merits of ketogenic diet

- · Ketogenic diet also help to remove water store in intracellular space or remove unwanted water from body.
- · Ketogenic diet best for fat loss management
- Ketogenic diet best for diabetic patients or cancer patients.

# Supplement for weight loss or management apart from diet

#### **Protein**

As we all know about Protein is building block of muscle recovery, make up of amino acids there are several types of protein but fast digesting protein is whey. Whey is made up of basically form dairy products: Milk, Panner, Curd etc.

There are various form of Whey protein are categorised

- 1. Concentrate protein
- 2. Blend protein
- 3. Isolate protein
- 4. Hydrolysed protein.

In 100 gram of Penner 22 - 38 gram protein, Energy 343 kcal from Fat 242 kcal.

It is highly recommend at the time of fat loss journey if individual not able to take or full fill his/her protein intake then we have to add supplement. Advantage of supplement is just we get protein, carb, energy without full of stomach. Be aware before buying health improvement supplement please check licence number, Slot Number, expiry date in protein there are many piracy is there in supplement mafia market. we categorized fake protein those have no mixability, lump should be shown in figure 3 respectively.



Figure 3: Fake protein those have lump after mixing.

This is highly recommended if individual have capabilities to afford panner, tofu for protein full fill daily requirement that would be good apart from supplementation but supplement only works when person taking good Healthy diet.

## Advantage of protein

- Helps for fat loss or shredding
- Helps for muscle growth [Person have good muscle mass he can achieve fast fat loss goal]
- Helps for loss of hair, skin growing or healthy skin
- Helps for boasting immunity.

## **BCAA**

Branch Chain amino acid is essential amino acids whichever body does not produced these three essential amino we have to take form outer source for recovery of muscle. The three essential amino which is present in BCAA was valine, isoleucine, leucine are in 2:2:1 ratio form. There is several advantage such as maintain blood sugar level, increase muscle mass, helps recovery, enhance weight loss, may reduce of liver disease. Dosage - 12 gram for men in day and 9 gram for women in day.

**L-Arginine:** L-arginine helps for blood circulation if blood circulation is good almost disease chances should be minimize even L-arginine should be recommended for fat loss journey or other medical health disease such as erectile dysfunction in male it have nitric oxide which works to improve the blood circulation to all body parts. Hence L arginine is best supplement for fat loss or erectile dysfunction ED.

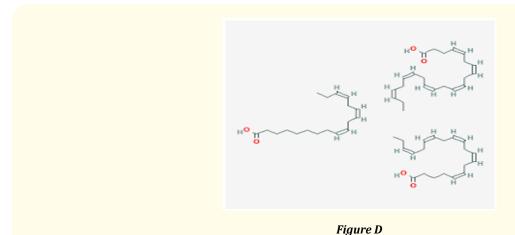
$$H_2N$$
 $H_2N$ 
 $H_2$ 
 $CO_2H$ 
 $NH_2$ 
 $Figure B$ 

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**CLA:** Conjugated linoleic acid is basically found in natural food such as meat found in meat or dairy products it was a fatty acid. Best supplement for fat loss those have 25 BMI or below CLA work very fast. Dosage - 5 gram daily recommended.

## Omega 3

Omega 3 is very good for skin, joint pain, it is combined three fatty acid ALA, DPA, DHA. Omega 3 source include fish and flaxseed and in dietary supplements, such as fish oil, walnuts.



## **Material and Methods**

- · Whey protein: Natural food form like tofu, panner/protein powder twice a day for muscle building and recovery.
- Omega 3: Flaxseed -3 gram/fish oil capsule form 1 capsule in a day [250 Mg].

- L- Arginine: Body produce itself L- arginine it helps for regulation of blood flow towards the all body parts it consist nitric oxide which main work flowing of blood in veins. 250 mg capsule is highly recommended with fat loss journey it helps for muscularity. 500 mg capsule is recommended for those have Erectile dysfunction.
- BCAA: Branch chain amino acids is made-up of three essential amino 2:2:1 ratio form these amino recommended for muscle recovery, fat loss etc. Body is not produce these essential amino so we have to take it from external source such as supplement before taking supplement check three amino profile and their ratio should be 2:2:1. Dosage - 5 gram before exercise with water. It helps for fatigue, sour mass, gain muscle, recovery muscle etc.
- Apple cider Vinegar: There are too many myth and study about this vinegar few study clearly mentioned take apple cider for weight loss. But there is no scientific prove apple cider vinegar helps to achieve fat loss goal this is not primary source for fat loss but it helps for indigestion, heart disease, Improved blood sugar level. Dosage - 1 Teaspoon in a day should be recommended with water/without water/salad.

## Method

Take 1 Spoon Apple Cider Vinegar with luke warm water in empty stomach, after that do cardio exercise, take one scoop protein 25 - 30 gram or take 100 gram paneer in breakfast, or follow Ketogenic diet after lunch meal 30 minutes later take one capsule CLA, after 1 hour take 1 L- arginine capsule with normal water, if individual doing intensive workout or any physical work then take BCAA with that 5 gram powder form with normal water, before sleep at least 4 - 5 hour take 30 gram protein from any source supplement/food, before sleep take omega 3 capsule. This cycle should be continue at least 4 - 5 month's for good results and it helps achieve fat loss goal earlier and safer.

## Conclusion

These supplement does not doing any miracle without exercise, proper sleep, macro micro nutrients full fill diet these supplement work as support primary is natural diet, exercise, add water in 5 - 6 litre. In this article we discussed about all supplement their advantage, fat loss goal journey schedule in last main conclusion is supplement only work when person take low calorie in diet, full nutritional, sleep, workout then any individual achieve goal 3 - 4 months [1-16].

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#### **Author Contribution**

MGK - Wrote the manuscript, Design Manuscript, UY - Wrote the manuscript, Review the final manuscript, SH, GF, NS, NF - Data Collection, MD, HB - Figure, Graph, Table, KL - Title, Abstract Design.

#### **Conflict of Interest**

No conflict of interest.

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