



Lecture 25:

Plateau in Weight Loss

Part 1

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Plateau:

- A very common problem during weight loss is that the weight does not go down anymore; progression comes to a halt, and the scale stops budging!
- Weight loss clients hate to see not losing weight anymore despite following their dietary plans and exercise programs meticulously.

- Majority of weight loss seekers experience plateau during weight loss process at some point.



Plateau is a common occurrence during weight loss!

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Definition of Plateau:

- There is no universal agreement about the definition of weight loss plateau.
- The **Canadian Academy of Sports Nutrition** defines weight loss plateau in **gym goers** and **non – gym goers** based on the few criteria.

Non – Gym Goers:

Criteria for non – gym goers:

- Initial weight loss.
- Weight loss cessation **for 3 weeks or more** while being on a specific diet.

Gym Goers:

Criteria for gym goers:

- Initial weight loss.
- Initial drop in body fat.
- Weight loss cessation **for 3 weeks or more** despite exercising and following a diet together.
- A halt in dropping body fat for 3 weeks or more despite exercising and following a diet together.

How To Predict Plateau:

- The higher the amount of weight you want to lose, the higher the chance you would hit plateau.
- You would be able to predict the possibility of the occurrence of plateau by using **Abazar`s formula**.

% of Plateau = **Desired Weight Loss (lbs) X 2 X Abazar`s Factor(s)**

Abazar`s Factors to Calculate the Risk of Plateau:

Age (years):	Score	Medications:	Score
10 – 20	1.0	Birth control pills	1.1
20 – 40	1.1	Antihistamines	1.1
40 – 60	1.2	Antipsychotics	1.1
Over 60	1.3	Anti – Diabetes	1.1
Gender :		Antidepressants/Anti – anxiety	1.2
Male	1.0	Sedatives/Tranquilizers	1.2
Female	1.2	Tagamet/Zantac	1.2
Lifestyle:		Beta – Blockers	1.3
Active	0.8	Calcium Channel Blockers	1.3
Sedentary	1.2	Corticosteroids	1.3
Medical Conditions:			
Diabetes	1.1		
Kidney disease	1.1		
Hypothyroidism	1.2		
Polycystic ovarian syndrome	1.2		
Cushing syndrome/disease	1.2		
Depression	1.2		
Insomnia	1.2		
Liver disease	1.3		

Example:

You are a 29 years old female. Your current weight is 145 lbs and you want to lose 25 lbs. You have been diagnosed with low function thyroid 3 years ago and you are taking synthroid medication and birth control pill. Exercise is not a part of your lifestyle. How much is the risk of plateau?

Age: 29.....1.1

Female:.....1.2

Low function thyroid....1.2

Birth control pill.....1.1

Desired weight loss.....25

% of plateau = $2 \times 25 \times 1.1 \times 1.2 \times 1.2 \times 1.1$

% of plateau = 87.12%

Multiple Plateaus:

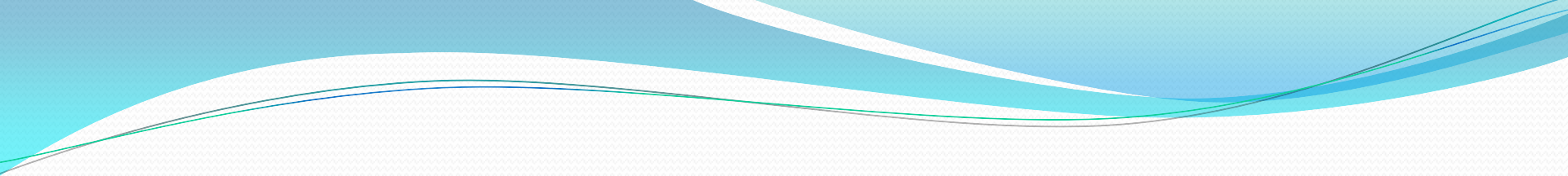
- It is a resistance against the changes the body is facing with. Some people might plateau more than once, which is called “**multiple plateaus**”.
- If you reached plateau **twice or more**, you would have multiple plateaus.
- The higher the amount of weight you are planning to lose, the higher the chance to have multiple plateaus.

- If you plateaued twice or more, you would have “staircase weight loss” pattern.

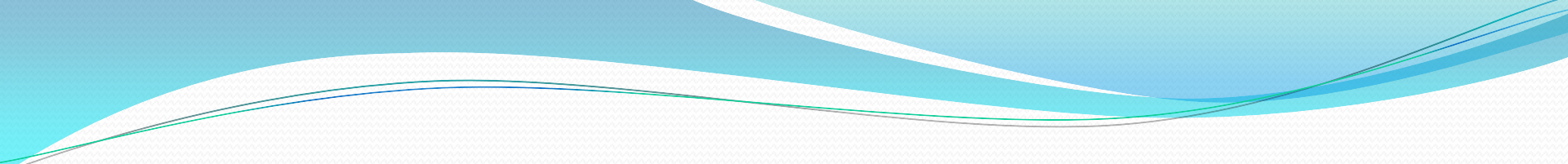


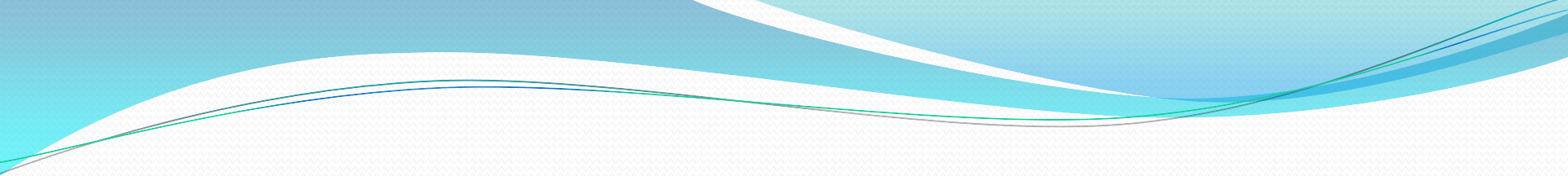
People at Risk for Plateau:

- 1) Unsupervised weight loss.
- 2) Inadequate protein intake.
- 3) Poor fiber diets.
- 4) Insufficient water intake.
- 5) Undernourished diets.
- 6) Pear-shaped (Gynecoid) obesity.
- 7) People with IRLA pattern of weight loss.
- 8) Stress, emotional or physical.
- 9) Previous yo-yo diet.

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- **10)** Rotational work shifts (night-day-night-day).
 - **11)** Cellulite (also called orange peel syndrome or cottage cheese skin).
 - **12)** Taking “Glucosamine” for joint health.
 - **13)** Being under chemotherapy or chemotherapy within the past 6 months.
 - **14)** Hormone imbalances.
 - **15)** Hormone replacement therapy (HRT).

- **16) Medications: some medications interfere with body metabolism. The list is (but not limited to):**
 - a) Anti-depressants.
 - b) Anti-anxieties.
 - c) Sedatives and tranquilizers.
 - d) Antipsychotic and psychotropic agents.
 - e) Birth control pills.
 - f) Corticosteroids.
 - g) Medications for high blood pressure especially beta-blockers.
 - h) Medications for migraine and seizures.
 - i) Medications for allergy (antihistamines)
 - j) Medications for stomach acidity (Cimetidine [Tagamet], Ranitidine [Zantac])

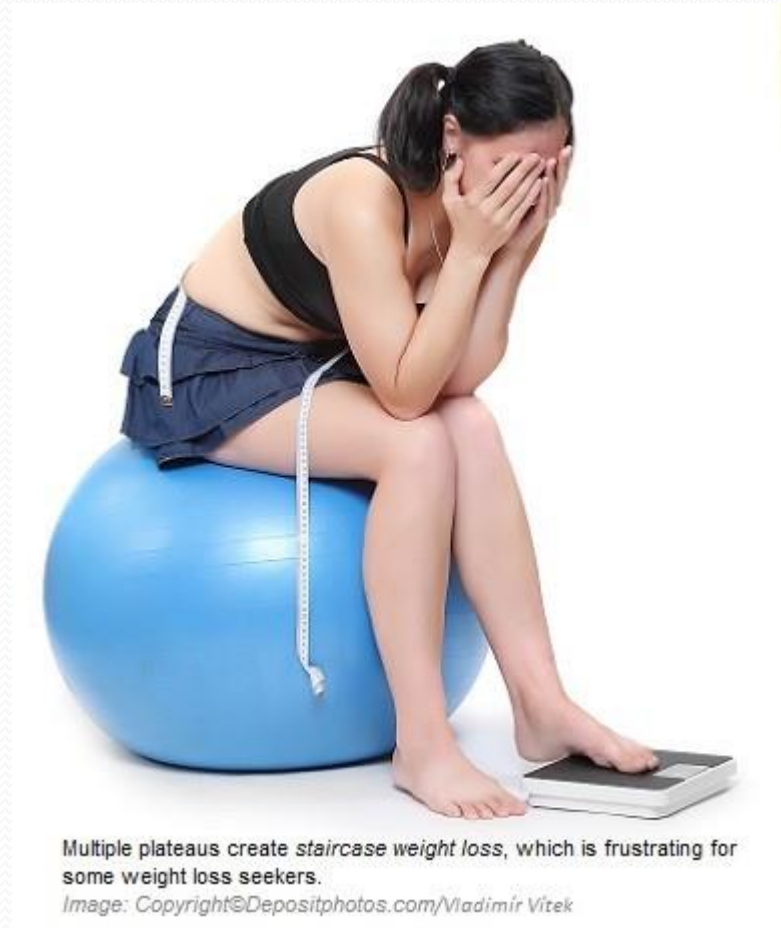
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- **17) Medical conditions:**
 - **a) Diabetes.**
 - **b) Liver and kidney failure.**
 - **c) Low function thyroid.**
 - **d) People with totally or partially removed thyroid gland.**
 - **e) Cushing disease or syndrome.**
 - **f) PCOS (Polycystic ovarian syndrome).**
 - **g) Sleeping disorders, especially insomnia.**
 - **h) Bulimia.**
 - **i) Mood disorders, especially depression.**

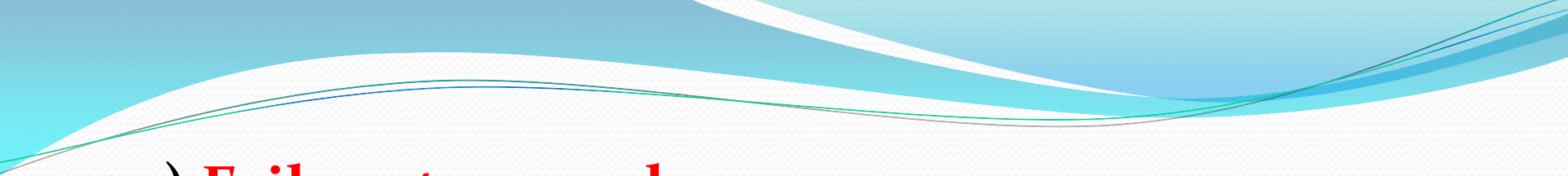
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- **j) Chronic pancreatitis.**
 - **k) Chronic pain disorders.**
 - **l) Sheehan syndrome (damage to the pituitary gland due to interruption of its blood supply after a bleeding incident during pregnancy).**

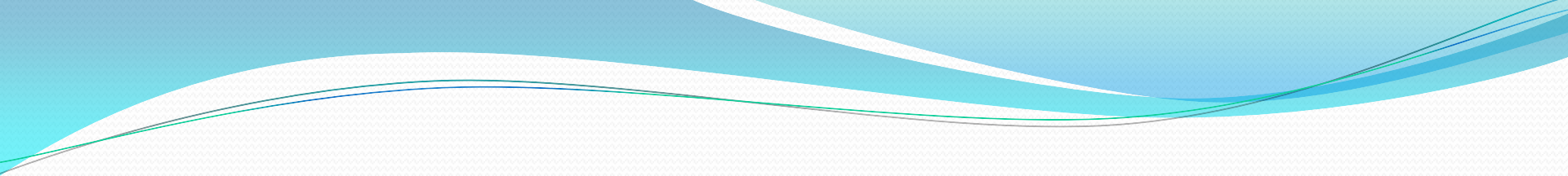
Causes of Plateau:

- You should not look for a single reason if your client hit plateau.
- In fact, more than just one reason leads to plateau, making it difficult sometimes to overcome.

- **Plateau is a multifactorial incident.** Though the exact cause of plateau is unknown, the experts have been hypothesized few reasons:



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- 1) **Failure to comply.**
 - 2) **Body adaptation.**
 - 3) **Body acidification.**
 - 4) **Insulin resistance.**
 - 5) **Leptin (appetite hormone) insensitivity.**
 - 6) **Imbalance among leptin, ghrelin (hunger hormone), adiponectin, and orexin.**
 - 7) **Micronutrients deficiencies.**
 - 8) **Dysbiosis.**
 - 9) **Disordered metabolism of serotonin.**
 - 10) **Overtraining syndrome.**

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- **11) No – Carbohydrate Diet.**
 - **12) Lack of exercise or failure to build muscle.**
 - **13) Undiagnosed medical conditions.**
 - **14) Toxic overload.**
 - **15) Lazy liver.**

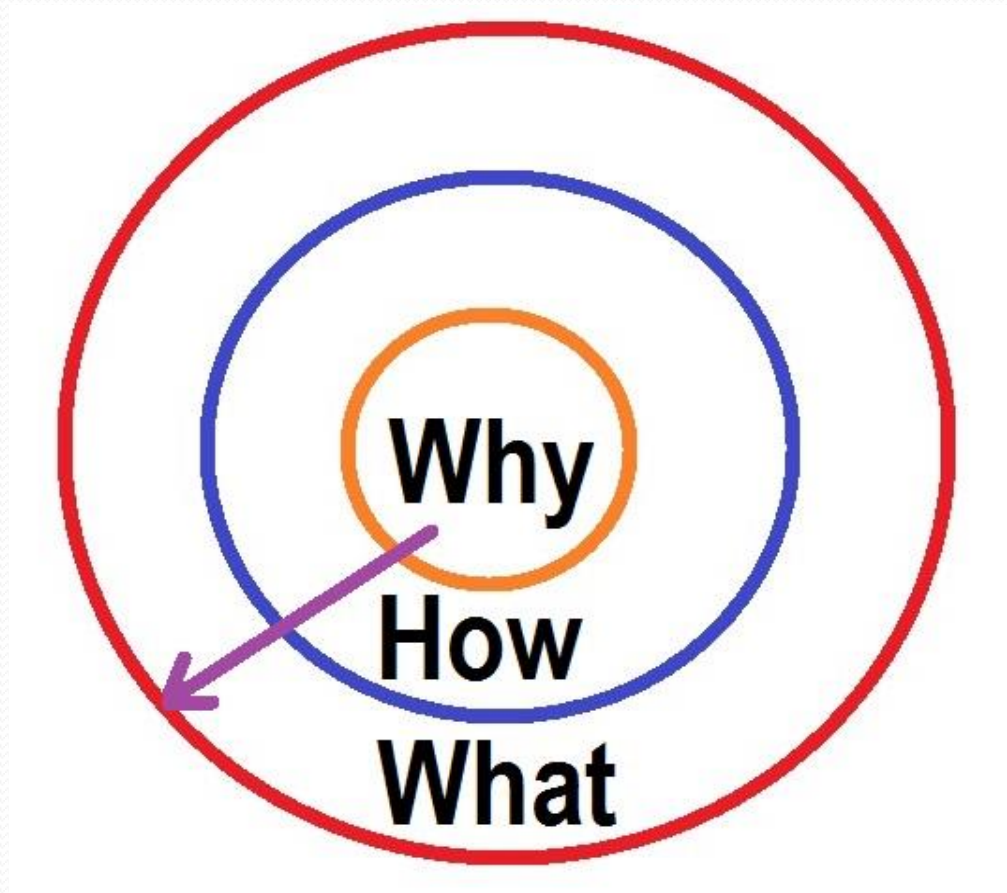
1) Failure to Comply:

- Lack of discipline.
- Lack of commitment.
- Lack of motivation:
 - Weak.
 - Moderate.
 - Strong.



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- **Results – focused:**



Solutions:

Be prepared to:

- Re – evaluated your goals.
- Find strong motivation.
- Do not focus on results.
- Discipline yourself:
 - **Either suffer the pain of Discipline or suffer the pain of Regret.**
- Realize that fitness is not a sprint sport. It is an endurance sport.
- Family support.

2) Body Adaptation:

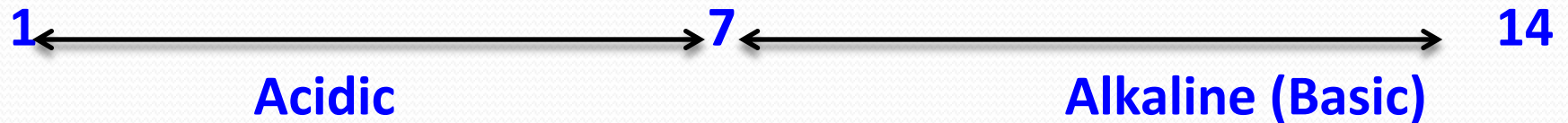
- **It is a process by which the body gets accustomed to the same foods or same exercise routines.**
- **It is a mechanism by which the body biologically tries to avoid changes and to survive.**
- **When you are on a diet and keep eating the same foods, your body metabolism gets used to them and finally slows down.**
- **To have the same foods everyday fails to provide different nutrients to the body needed to keep the body metabolism active and going.**

Solution:

- **Change the foods.**
- **Recommend a variety of foods, at least 3 different meals in a week.**
- **Add a high quality product that provides different micronutrients.**
- **Get them out of the same exercise routines.**
- **Discuss the situation with their coaches and trainers to see if they follow a periodization.**

3) Body Acidification:

The acidity is measured by pH.



- The normal pH of the blood in human being is **7.35 – 7.45**.

* If pH of blood moves to **below 6.8** or **above 7.8**, cells stop functioning and we die.



Alkaline Diet:

- 1) Makes aging process slower.**
- 2) Prevents from cancer, and slows down progression of cancers.**
- 3) Boosts energy and metabolism.**

Alkaline Foods vs Acidic Foods:

- **Very Acidic:** yolks, rice, sugar, flour, yeast, wine, yogurt, chocolate, fried and processed foods.
 - **Slightly Acidic:** red meats, chicken, cheese, peanuts, corn, beans, most grains, coffee, **plums**, and **cranberries**. **20%**
 - **Acidic to Neutral:** egg whites, breads, milk, cheese from goat milk, fish, almonds and walnuts.
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- **Neutral to Alkaline:** strawberries, pear, apple, and Soya.
 - **Slightly Alkaline:** lime, lemon, grapes, grapefruit, orange, carrot, potatoes, vegetables, lettuce, cherries. **80%**
 - **Very Alkaline:** cucumber, olive, spinach, radish, turnip, bananas, figs, and watermelon.



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Solutions:

- 1) Drink water: 2 – 3 liters/day.
- 2) Remove acidic foods from your diet.
- 3) Increase **green leafy vegetables**, esp dandelion, coriander, parsley, spinach and kale.
- 4) Incorporate “**grapefruit**” in your diet:
 - makes the body alkaline.
 - contains “HMB”.
- 5) Add more lime, lemon, and vinegar.
- 6) Add alkalizing products:
 - **Apple cider vinegar pill.**
 - **Green powder.**

Homework:

- 1) Describe definitions of plateau and also how you calculate the risk of plateau.
- 2) Describe the symptoms of an acidic body and its solutions.



