



# WEIGHT MANAGEMENT PROGRAM

## Program Orientation



## • What is it?

- ✓ Behavioral lifestyle program.
- ✓ 104 week program consisting of Physician/ Provider and Dietitian visits.
- ✓ Very-low calorie diet followed by transition to balanced, individualized low calorie meal plans.
- ✓ Focus on long-term *sustainable* weight maintenance.

## • Who may be eligible?

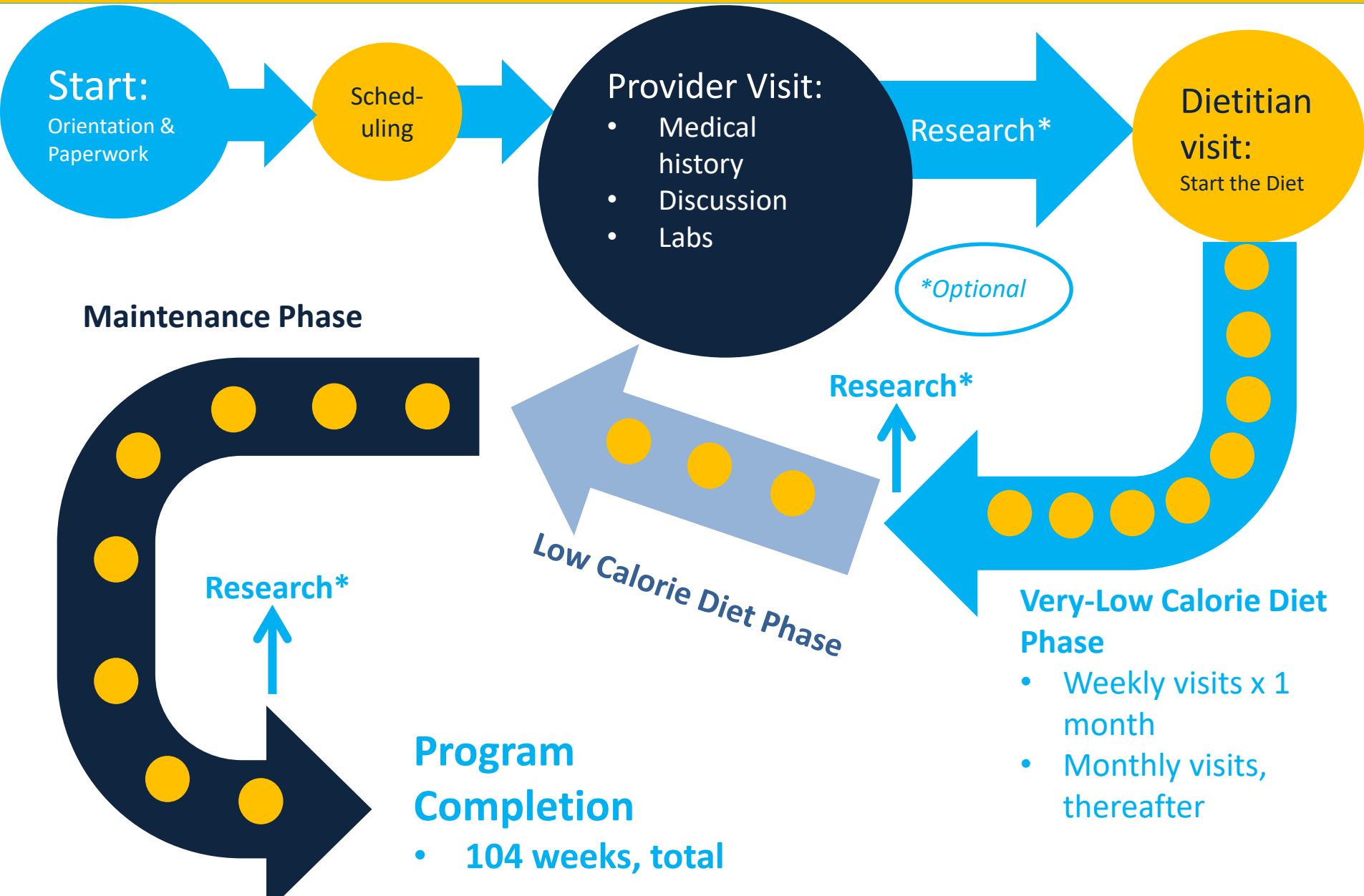
- ✓ Adults between 20 – 70\* years old
- ✓ Body Mass Index (BMI) 30 to 50 kg/m<sup>2</sup>\*\*  
*\*\*Asian/Asian-Indian with BMI between 27 to 50 kg/m<sup>2</sup>*

## • Which insurers cover the program?

- ✓ Blue Care Network (BCN)
- ✓ Blue Cross Blue Shield of Michigan (BCBSM)
- ✓ Health Alliance Plan (HAP)
- ✓ Priority Health
- ✓ Commercial (other): *patient would be provided with billing codes to check with the insurer*

*\*Medicare does NOT cover the program*

# WEIGHT MANAGEMENT PROGRAM — Brief Overview

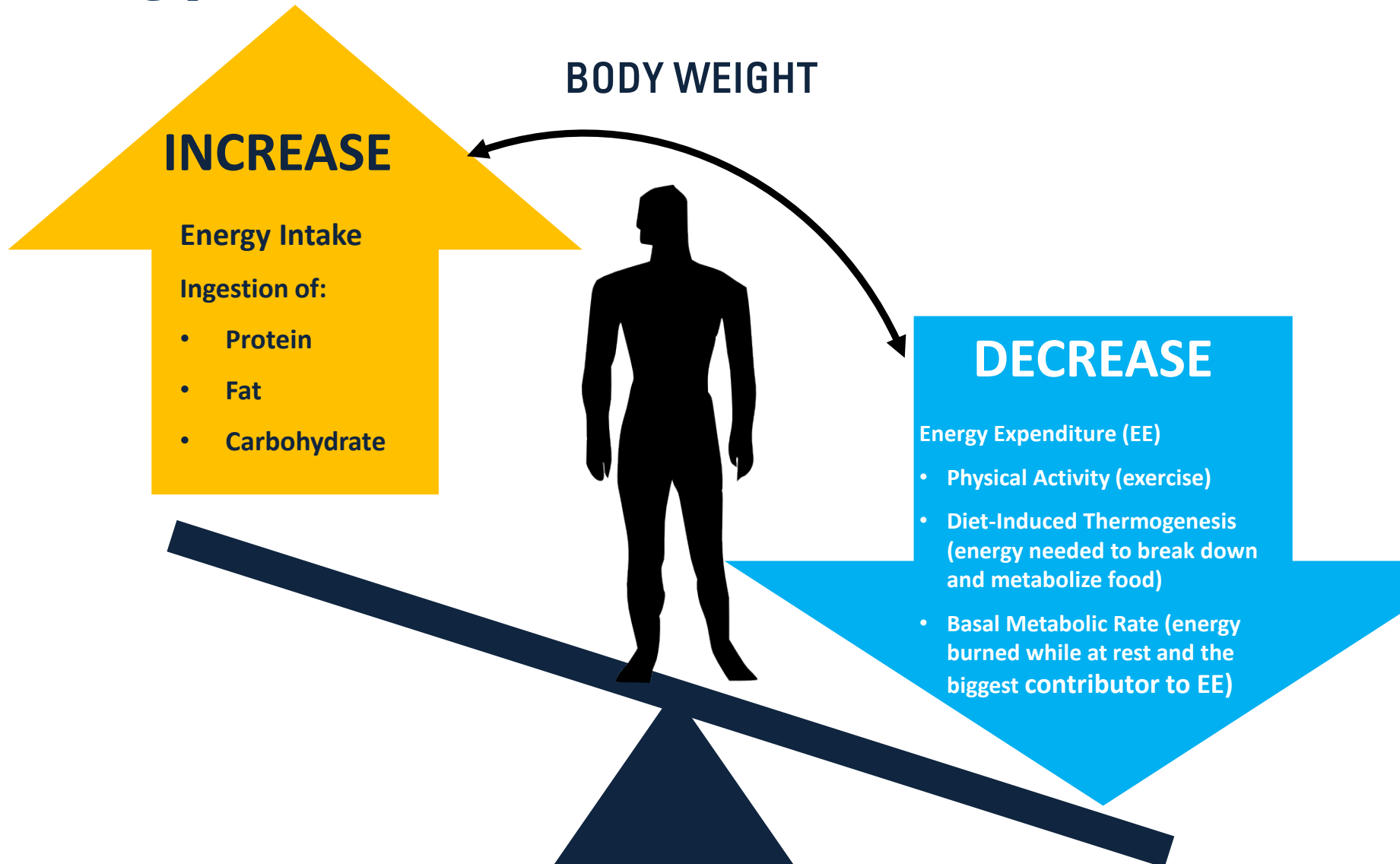


Want to know some **STATISTICS**  
about **OBESITY**?

Check out **Appendix (A)**

We think it is important to know  
some of the **FACTS** about **OBESITY**.

# Energy Balance: What Determines Weight?



Body weight is determined by the balance between the calories we **consume** and the calories we **expend** (aka: **"burn"**).

# OBESITY HEALTH RISKS:

What are the consequences of too much weight? Overnutrition leads to a number of metabolic problems that lead to diseases such as diabetes and heart disease.



Heart disease



Stroke



Diabetes



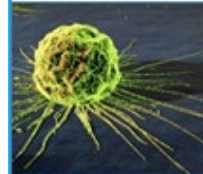
Kidney disease



Blood clots



Breathing problems



Cancer



Pregnancy complications



Fatty liver disease



Premature death



Want to have a better  
understanding of the **DISEASE** of  
obesity?

Check out **Appendix (B)**



# WEIGHT MANAGEMENT PROGRAM



**PROGRAM GOAL:** Identify strategies that will result in long-term weight management for individuals with obesity, using the latest research and clinical strategies.

We are committed to **educating**,  
**motivating**, and **empowering**  
individuals to make **healthy lifestyle choices!**



## PERSONALIZED PROGRAM:

Multidisciplinary approach to weight loss and weight maintenance

Structured and organized into different **phases**:

- Initial: **very low** calorie diet
- Transition: **low** calorie diet
- Maintenance: **individualized** diet plan

Services: one-on-one sessions that provide...

- Medical guidance
- Advice regarding activity/exercise/conditioning
- Strategies for prevention of weight regain:
  - ✓ Behavioral
  - ✓ Nutritional
  - ✓ Pharmacological

## Stepped Obesity Treatment Regimen

What happens at the **FIRST VISIT** to the physician/provider?

- Your **health** and **weight history** is obtained.
- Your current **medication list** is reviewed.
- Blood work (aka: **labs**) are performed.
- The **research** is discussed and your consent to participate is obtained (if you are interested).



## ADJUST medication regimen

- Minimize 'weight positive' medications
- Substitute with weight neutral or weight negative medications



## PROVIDE Exercise “prescription”

- Recommendations will be customized based on **health status**.
- **Standard:** work up to 40-60 minutes of exercise/ enhanced activity per day.
- **Initial** phase: **low** intensity activity
- **Maintenance** phase: **moderate** intensity activity



## INITIATE caloric restriction

- Initial **very-low**-calorie diet (VLCD )(800 cals/day) or **low**-calorie-diet (LCD) (1000-1200 cals/day):
- Meal substitution/replacement
- Dietary counseling: One-on-one with registered dietitian (RD)
- Initial emphasis on calories and caloric density, not fuel



*The meal replacement diet will not start until you meet formally with the program's dietitian.*

## VERY-LOW Calorie Diet (VLCD) Phase

- Duration: 8-12 weeks\*
- Caloric intake: typically 800 calories/day\*
- Product(s):
  - Optifast® 800 Shakes (or Ready-to-Drink shakes)
  - Optifast® soups
  - Optifast® Bars (*not used, initially*)
- Details: will be explained by the dietitian.
- *Average diet: typically 4-5 shakes + 1 soup*

**\*Variable: as determined by your provider**



*The meal replacement diet will not start until you meet formally with the program's dietitian.*




## WHY use a VERY-LOW Calorie Diet (VLCD)?

- Research on diets using VLCD shows that it is an effective tool both for weight loss and maintenance of a reduced weight.
- It is intended to be a tool that is meant to be used on an intentional basis for a limited amount of time.
- It is a tool that can help the participant separate him/herself from unhealthy food habits by making meals “decision-free.”
- While on the VLCD, there is time to learn nutrition information and start practicing lifestyle and behavioral skills








## WHEN is a VERY-LOW Calorie Diet (VLCD) used?

- Full meal replacement/ VLCD is appropriate for individuals who have a significant amount of weight to lose  
-AND-
- Past efforts to cut-back on food or follow a reduced calorie meal plan have not resulted in weight loss  
-OR-
- Past diet efforts have resulted in weight LOSS but the reduced weight could not be SUSTAINED.





## WHAT amount of weight loss should be expected on the VERY-LOW Calorie Diet (VLCD)?

- Every individual is DIFFERENT!
  - In general, the following would be reasonable expectations:
    - After 1-4 weeks: a weight loss of 3-7%
    - After 5-8 weeks: a weight loss of 5-14%
    - After 9-12 weeks: a weight loss of 11-22%
- WITH AVERAGE = 15%



## CAN individuals with DIABETES use a VERY-LOW Calorie Diet (VLCD)?

- YES! Optifast® is recommended by physicians for their patients with diabetes because of the foods' nutritional formulation and low calories.
- Your medication(s) will be monitored by our physicians/providers and dosage may change throughout the program.



## CAN individuals with FOOD ALLERGIES use OPTIFAST®?

- Optifast® products are generally well tolerated by most people.
- Optifast® POWDERED shake mix (chocolate, vanilla, and strawberry) DO contain SMALL amounts of lactose. All other products are lactose-free.
- Some of our products, however, contain common allergens such as **DAIRY, EGGS, WHEAT, SOY AND PEANUTS**.
- Please let us know if you have any allergies prior to beginning the shake regime, or if any GI discomfort occurs.



## WHAT is the COST of OPTIFAST®?

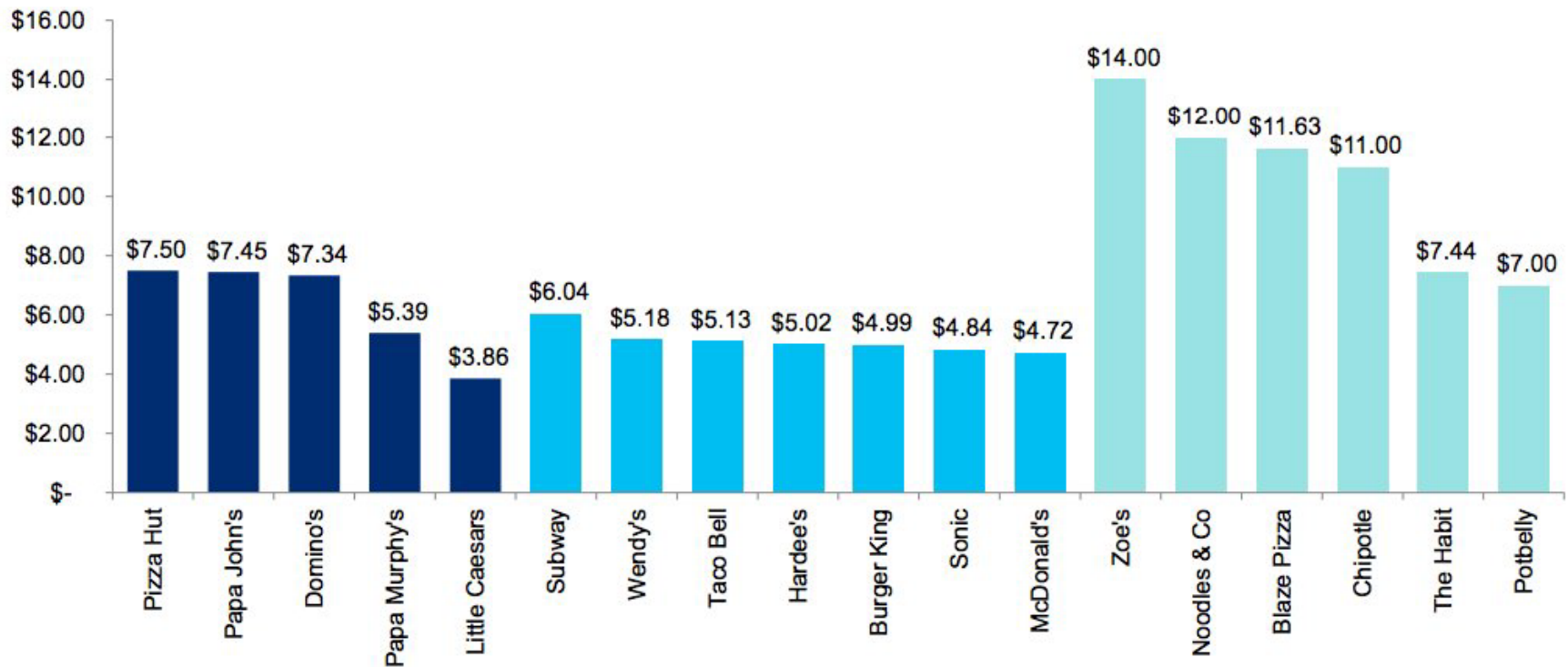
- You are responsible for purchasing the product (~\$2.60 per shake or ~\$13-15/day). **Insurance does NOT cover the cost of meal replacements.**
- *Of note:* The average American spends \$140/week on food according to the US Bureau of Labor Statistics Consumer Expenditure Survey.



# WEIGHT MANAGEMENT PROGRAM



HOW does the COST of  
OPTIFAST® compare to fast  
food purchases?



Source: Citi Research, NPD Crest, FRSH Investor Presentation, Blaze Investor Presentation



HOW does the **COST** of  
**OPTIFAST®** compare to other  
weight management programs?

- The costs of our program are comparable to/ competitive with many major commercial weight programs.

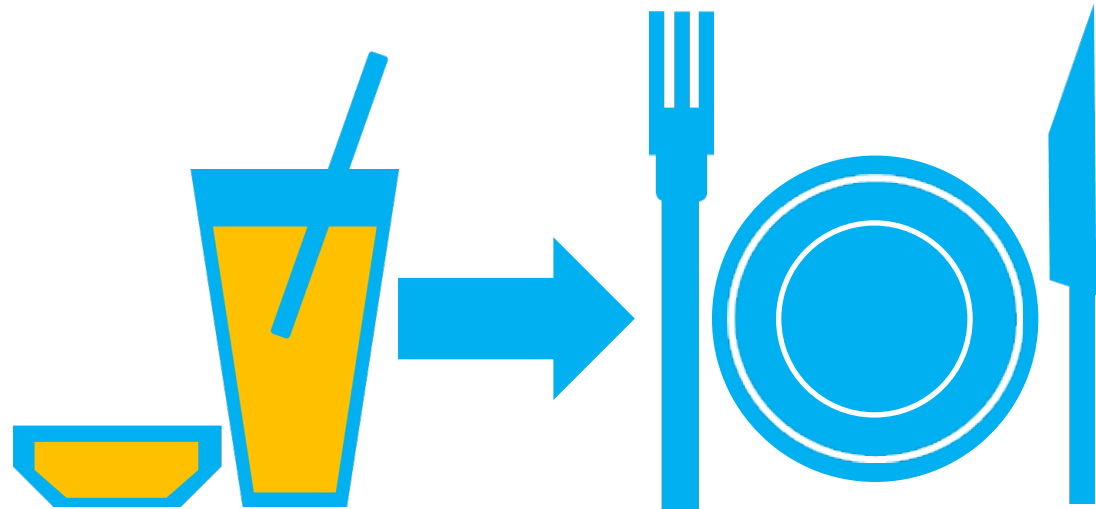
Want to learn more about the  
**RESEARCH DATA** surrounding  
**MEAL REPLACEMENT?**

Check out **Appendix (C)**



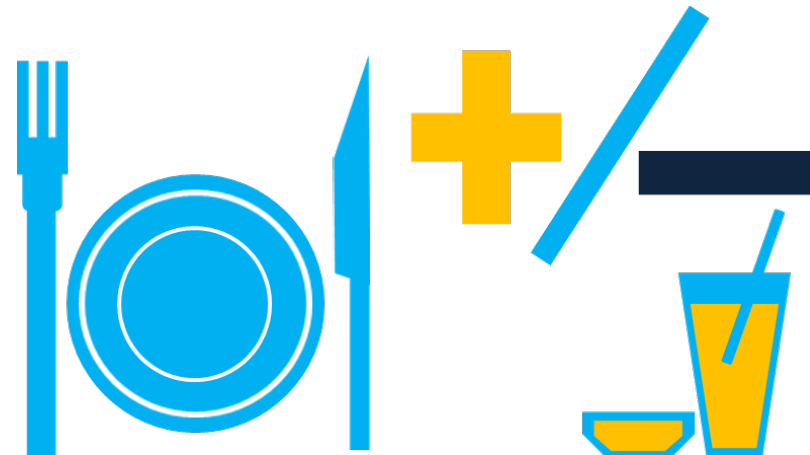
## LOW Calorie Diet (LCD) Phase

- Initiation: following ~15% weight loss, “conventional” food is gradually reintroduced. This is tailored to your needs & preferences.
- Duration: Variable.
- Purpose: transition from full meal replacement back to convention food in a **STRUCTURED** way.



## Weight MAINTENANCE Phase

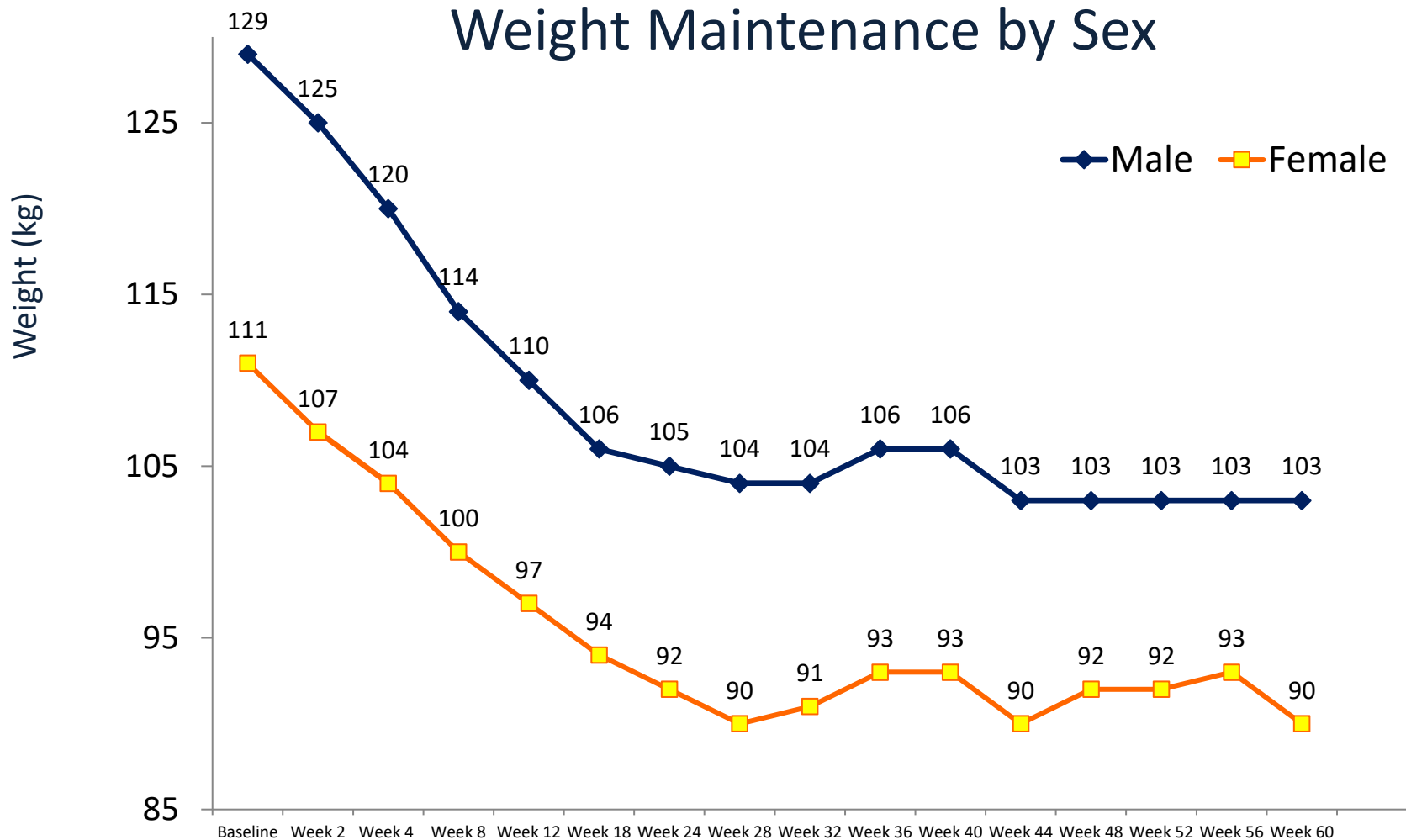
- Duration: Entire rest of the program
- Purpose: Maintain the REDUCED WEIGHT STATE
- Methods:
  - Dietary counseling/education
  - Behavioral techniques
  - In appropriate situations, the following may be considered:
    - Referral to a therapist
    - Use of weight control medication(s)



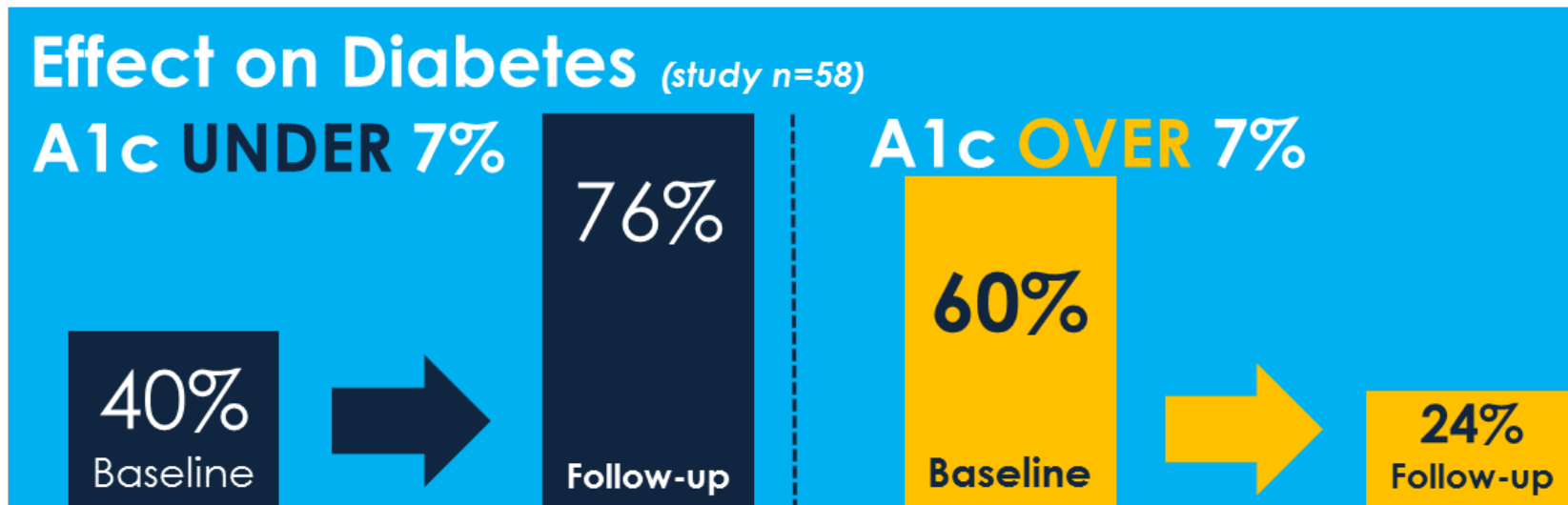
# WEIGHT MANAGEMENT PROGRAM



What **RESULTS** have been attained by participants?



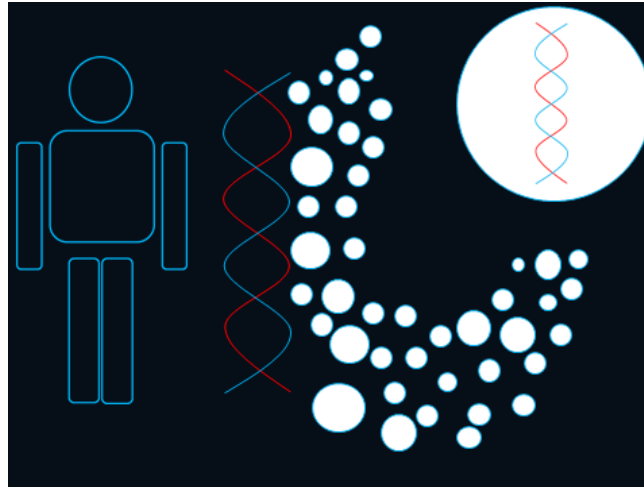
# What **RESULTS** have been attained by participants with **DIABETES**?



- **Sixty percent** of patients with established diabetes had **baseline HbA1c over 7.0%**.
- At **follow-up**, **76%** of patients had **HbA1c UNDER 7.0%**.
- At **follow-up**, **100%** of patients with **newly diagnosed diabetes** and **76%** of patients with **established diabetes** had **HbA1c UNDER 7.0%**
- At **follow-up**, **57%** of patients were on **≤ 1** diabetes medication(s)

Adapted from: Rothberg  
et al., 2014 J Diabetes  
Complications

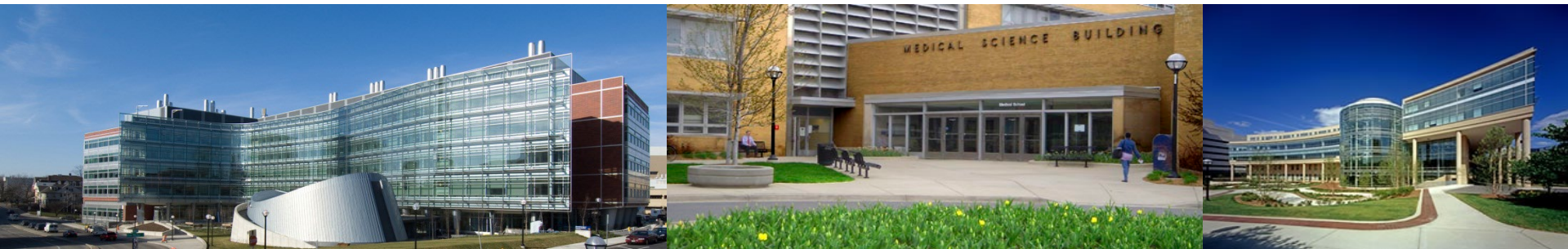
## RESEARCHPROGRAMCOMPONENT



- **Research** programs are offered by the **UNIVERSITY OF MICHIGAN**
- Research is **separate** from the clinical program, but can be helpful to add important information to help you manage your health
- Participation is **voluntary**

## RESEARCH COMPONENT: “PHENOTYPING”

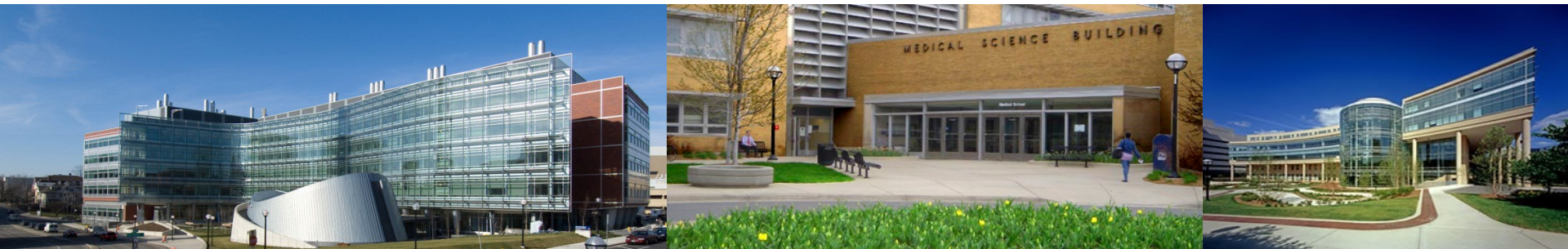
- **WHAT IS IT?** It is an examination of gene-gene interactions and gene-environmental interactions for the purposes of understanding the biology of weight regulation
- **WHY DO IT?** This better understanding may help us identify the factors that predict success for weight loss and maintenance of weight loss. Furthermore, this may be the key to changing our treatment paradigms so that they become **even more individualized** and **even more effective**
  - We believe that the research is integral to the **understanding of obesity**
  - It may also lead to finding/ examining potential novel therapeutic targets
- **MUST I DO IT?** NO - Participation is **VOLUNTARY**



## RESEARCH COMPONENT: “PHENOTYPING”

### WHEN DO I GO FOR TESTING?

- **INITIAL TESTING:** after seeing the physician/provider but BEFORE starting the diet.
- **INTERIM:** after you achieve a certain degree of weight loss (typically 10-15%)
- **FINAL:** At the END of the program





# RESEARCH COMPONENT: “PHENOTYPING”

# PROCEDURES





Oral  
Glucose  
Tolerance  
Test  
(OGTT):  
2 hour test  
to diagnose  
diabetes\*.

Fat and  
muscle  
biopsies  
  
Body  
composition  
by DEXA or  
BodPod.

Questionnaires  
regarding  
overall health  
and impact of  
weight on  
emotional and  
physical well-  
being

Resting  
Energy  
Expenditure  
and Exercise  
Capacity  
(REE, V02  
max)

\*NOTE: ~1/3<sup>rd</sup> of the participants in the program have Type 2 diabetes mellitus and many were undiagnosed prior to OGTT.



## WHAT will be done with the RESEARCH information?

- If you participate in research, information and data that is relevant to your care will be shared with you and your primary physician/provider. This information includes your resting energy expenditure, your V02 max (aka: exercise capacity/level of fitness), your body composition data from DEXA, and your oral glucose tolerance test results.
- **This information is NOT shared with your insurance company.**

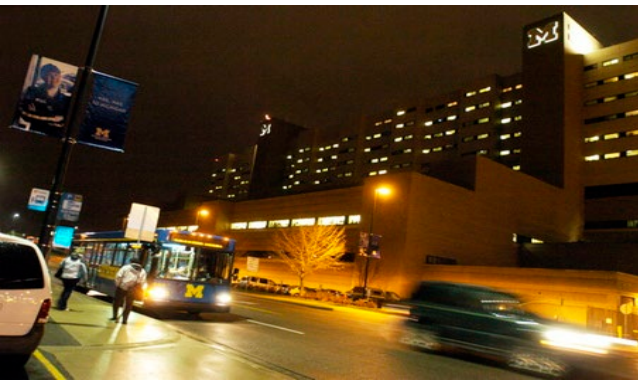


Want to learn more about the  
different **RESEARCH  
COMPONENTS?**

Check out **Appendix (D)**

## PROGRAM **WEBSITE**

- <http://www.uofmhealth.org/conditions-treatments/adult-weight-management>
- Please fill out “**INITIAL EVALUATION FORM**” and all the **QUESTIONNAIRES BEFORE** your first physician visit.  
Remember to **BRING** these with you to your first appointment.  
You may also email them to [wmpconnection@med.umich.edu](mailto:wmpconnection@med.umich.edu).
  - *You will complete the questionnaires again following ~15% weight loss and at the end of the 2 year program.*





## QUESTIONS CONCERNS?

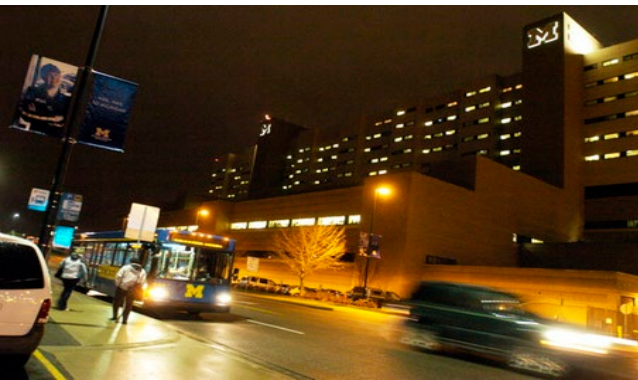
**Need to set up your first visit?**

**Please call: 734-647-5871 and speak with Rachel Brown**

**For research opportunities:**

➤ **Nicole Miller, MPH, RD:** [npiazza@med.umich.edu](mailto:npiazza@med.umich.edu)

**Need to set up your first visit? Please call: 734-647-5871 and speak with Rachel Brown**



## PUBLICATIONS

- The Impact of weight loss on health-related quality of life
- [www.ncbi.nlm.nih.gov/pubmed/24129672](http://www.ncbi.nlm.nih.gov/pubmed/24129672)
- The impact of a managed care obesity intervention on clinical outcomes and costs: A prospective observational study
- <http://onlinelibrary.wiley.com/doi/10.1002/oby.20597/full>
- Very-low-energy diet for type 2 diabetes: An underutilized therapy?
- [www.ncbi.nlm.nih.gov/pubmed/24849710](http://www.ncbi.nlm.nih.gov/pubmed/24849710)
- Effect of Total Meal Replacement Program Compared with Reduced - energy Food-Based Diet Plan on Glycemic Status-Results from the OPTIWIN Study
- [https://diabetes.diabetesjournals.org/content/67/Supplement\\_1/298-L](https://diabetes.diabetesjournals.org/content/67/Supplement_1/298-L)

