



Physician Assistant
25 yrs.



Director of APCs
Valley Preferred



Mom



LVP
Virtual Provider



Wife



Human



Member Wellness
Committee



Daughter

Childhood Obesity

Nancy Maulick MHS, PA-C



LVHN School APC

Objectives

- Understand the definition of Obesity.
- Review rates obesity in children.
- Identify children at risk and contributing factors for Obesity.
- Identify the risks and complications of Obesity in children.
- Discover treatment options for Obese children to reduce risks.

Definition Obesity

- Children--CDC Definition--Obesity is defined as a body mass index (BMI) at or above the 95th percentile for sex and age.
- Adults– BMI ≥ 30 kg/m²

Objective data to generate the diagnosis!

Current Obesity Rates / Trends

- The prevalence of obesity was 19.7% and affected about 14.7 million children and adolescents. (2017-2020).

[Cdc.gov/obesity](https://www.cdc.gov/obesity)

2-5 yrs old	12.7%
6-11 yrs old	20.7%
12-19 yrs old	22.2%

18% Children in PA are Obese (PA Department of Health 2020)

Who is at risk for Childhood Obesity?

- Gestational DM
- Pre-pregnancy Obesity
- Large BW
- Small BW

- Certain medications
- Family lifestyle
- Family genetics*
- Ethnicity and race*
- Poor nutrition behaviors

* Indicates uncontrollable factor

Contributing factors to Obesity in Children

- Family lifestyle
 - Lack of sports/ activity
 - Income level family
 - Increased gaming time
- Lack of extracurricular activities
 - Eating habits
 - Sleeping issues

Risks & Complications of Obesity in Children

Prediabetes

Type 2 Diabetes

Hypertension (HTN)

Early coronary vascular Dz

Adult Obesity (33% Prevalence in PA) vs (Colorado 24%)*

Higher Medical Costs

Eating Disorders

Depression

Sleep Apnea

Fatty Liver

Diabetes Stats

- Type 2 Dx Children increase by 4.8% in past decade.
- Childhood Type 2 DM-64% Female
- Childhood Type 2 DM-80.9% in minority category
- BMI over 85th Percentile is risk for DM
- The longer uncontrolled or poorly managed DM the more complications occur.

Prediabetes

Diagnosis*

- FBG: 100-125 mg/dL
- 2 Hr PG: 140-199 mg/dL after OGTT-75g
- Hgb A1c > 5.7-6.4%

Patients are asymptomatic
Early screening reduces risks

Risks

- Diabetes (DM)
- Stroke
- CVD
- Retinopathy
- Neuropathy
- Nephropathy

Screen

FHX DM, Obese, BW >9lbs, SBW w/ fast gain, GDM, GDM, PCOS

* ADA Prediabetes Criteria

Type 2 Diabetes (DM)

Diagnosis*

- FB \geq 126 mg/dL x 2
- 2 Hr PG \geq 200 mg/dL after OGTT 75g x2
- RG \geq 200 mg/dL w/ sx's
- Hgb A1c $>$ 6.5

Risks

- Cancer**
- Stroke PVD
- CVD Infections
- Retinopathy Skin disorders
- Neuropathy Fractures
- Nephropathy Dementia

No Non- surgical CURE (yet).
Can only control it.

* ADA Diabetes Criteria

**Cancer liver, breast, endometrium, pancreas, colon, and bladder American Diabetes Association. Standards of medical care in diabetes - 2022. [Diabetes Care. 2022 Jan 1;45\(Supplement 1\):S1-S264 PDF](#)

Treatment Prediabetes and Type 2 DM

- Reduce carbohydrates (**NOT** eliminate)
- Reduce simple carbohydrates (white flour)
- Reduce sugar intake
- Avoid fast food or dining out
- Avoid soda and sweet drinks
- High fiber foods
- Exercise!!
- Stop smoking
- Reduce daily caloric intake***
- More omega-3 FA- fish & nuts
- Oral DM medications
- Adults--Injectable weekly medication
- Bariatric surgery
- DM2 only--Daily Insulin Type 2 DM-multiple

Treatment for BOTH are almost the SAME

***Not less than 1200-1500 calories per day

Challenges in Health Care

- Teaching an old dog new tricks
- Habits are hard to break
- Healthy food is expensive
- Life events happen
- Diets are temporary
- Society dining habits against us
 - Larger serving sizes
 - Advertisements
 - Convenience

A Common Journey...

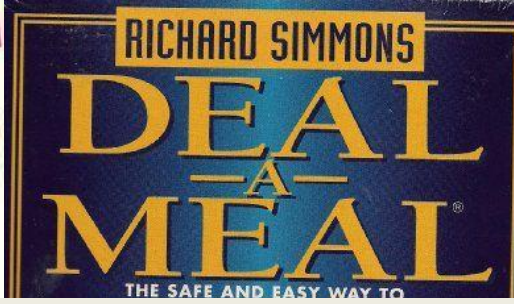
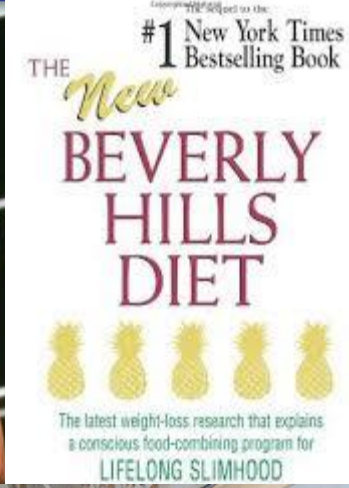
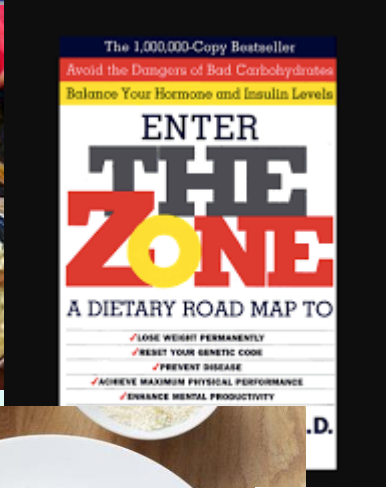
The 80's & 90's- The Process

- Frequent letters home on obesity from school.
- Grimaces from pediatrician, nurses & coaches when I stepped on scale.
- Constant name calling.
 - Nickname from a coach- “Fatty”
 - “She’s Big-boned”
- Omission from fun events due to size.
- Teams requiring food diaries.
- Food diary read aloud to entire team.
- Excessive exercise approach then quick failure.

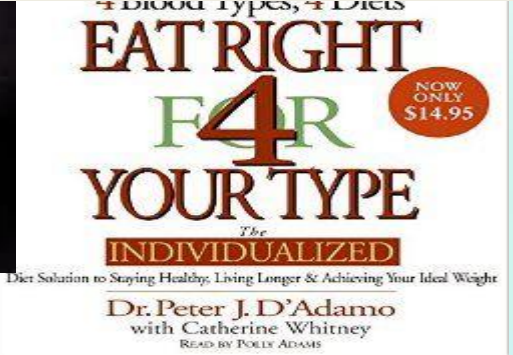
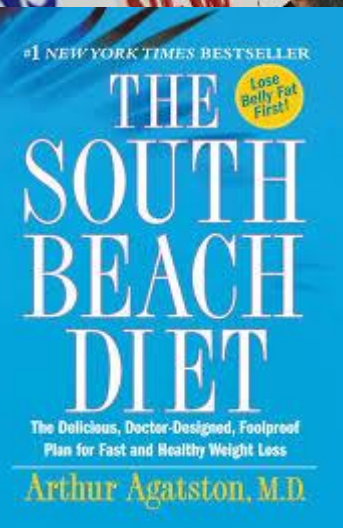
The Result

- Hiding food, binge eating, eating my emotions.
- Low self esteem, self conscious.
- Poor image of self– no mirrors.
- Do not like photos ever!
- Obsessed over my weight.
- Weight changes STILL every year up or down.
- Constant reminder of childhood negative images.





Healthy??



**THERE IS A POINT AT WHICH A
TRANSFORMATION HAS TO TAKE PLACE.**

PETER F. DRUCKER

A Positive Approach **REQUIRED**

We will shape the minds of these children for an eternity.

Recommendations:

- Start early in life.
 - Positivity.
 - Realistic.
-
- Education is empowerment. Criticism is demeaning.

The Golden Rule

- Treat others how **YOU** would like to be treated.
- MUST focus on a **positive** approach to the process.

Believing in oneself

Understanding commitment

Complete dedication from all involved

Understanding of the risks

Understanding of how to truly make a change over time.

- Lifelong changes-- not short-term goals.

Different Ideas

Home setting

Primary Care setting

Community level

School setting



Home Setting

- Close look at how we stock the house instead of lectures:
 - Avoid soda
 - Avoid candy
 - Avoid chips
 - Stock up on fruits and veggies
 - Position fruits and veggies at eye level
- Do NOT award good behavior with poor food choices.
 - “If you’re good I will get you a Happy Meal!”

Home Setting

- Walk daily with children– even after dinner.
- Promote meditation, Mindfulness early on in life.
- Encourage better sleeping habits
- Reduce gaming time with timers and/ or award extra 15 min for good behavior.
- Children follow adults.



Primary Care Practice

Pediatrics and Family Medicine

- Yearly weight counseling to parents and child.
- Check labs such as A1c, Liver enzymes, lipids early.
- Review family lifestyle choices and risks of obesity.
- Educate ENTIRE family on choices.
- Medication Rx options.

Community Setting

- Start early— WIC offers nutrition education and promotes healthy eating early -- from birth to 5 yrs old.
- Offer local activities such as promote YMCA events, community walks, family events to encourage movement for entire family.



Local Ideas

- *Freefall Trampoline Park* | 2800 Baglyos Cir., Bethlehem | freefalltrampolinepark.com
- *Sky Zone | Trampoline Park* | 2285 Schoenersville Rd., Bethlehem | skyzone.com/bethlehem
- *BounceU* | 1800 Sullivan Trl. Easton | bounceu.com/easton-pa
- *Grim's Orchard & Family Farms* | 9941 Schantz Rd., Breinigsville | grimsgreenhouse.com
- *Seiple Farms* | 5761 Nor Bath Blvd., Bath | seiplefarms.com
- *Lehigh Valley Zoo* | 5150 Game Preserve Rd., Schnecksville | lvzoo.org
- *Tolino Vineyards* | 280 Mt. Pleasant Rd., Bangor | Festivities include live music, yoga, s'mores, yard game | tolinovineyards.com
- Nockamixon State Park
- *Jacobsburg State Park* | jacobsburgtrailrides.com Horseback Trail Rides
- Blue Mountain Resort's [Summit Aerial Park](#)
- *Blue Mountain Resort* | 1660 Blue Mountain Dr., Palmerton | skibluemt.com/outdoor-adventures [disc golf](#)
- [disc golf](#) Bear Creek Ski Resort
- *Kira Willey Music, Movement & Mindfulness for Kids* | firefliesyoga.com Kira Willey's family yoga classes
- <https://www.thevalleyledger.com/?p=108394>
- <https://www.gv-ymca.org/events/31/healthy-kids-day.html>
- <http://lehighvalley.findandgoseek.net/>
- <https://www.gymtimepa.com/>
- <https://www.discoverlehighvalley.com/things-to-do/wellness-spas/gyms-fitness-centers/>

School Setting

- Do not offer soda or high caloric beverages in school.
- Offer healthy snack options.
- Rewards with creative activities.
- Recess with movement in the gymnasium or outside.
- Encourage after-school physical activities.
- Teach nutrition facts to ALL.



School Setting

- Create or Support a Yoga event for children at the school.
- Lean on local programs such as YMCA to help increase local participation.
- Formal recess games– yoga, animal yoga, frisbee with movement
- Make it fun- dance, laughter, music.
- Make it for All- not just obese children
- Address negative behaviors from others immediately.



What can you do?

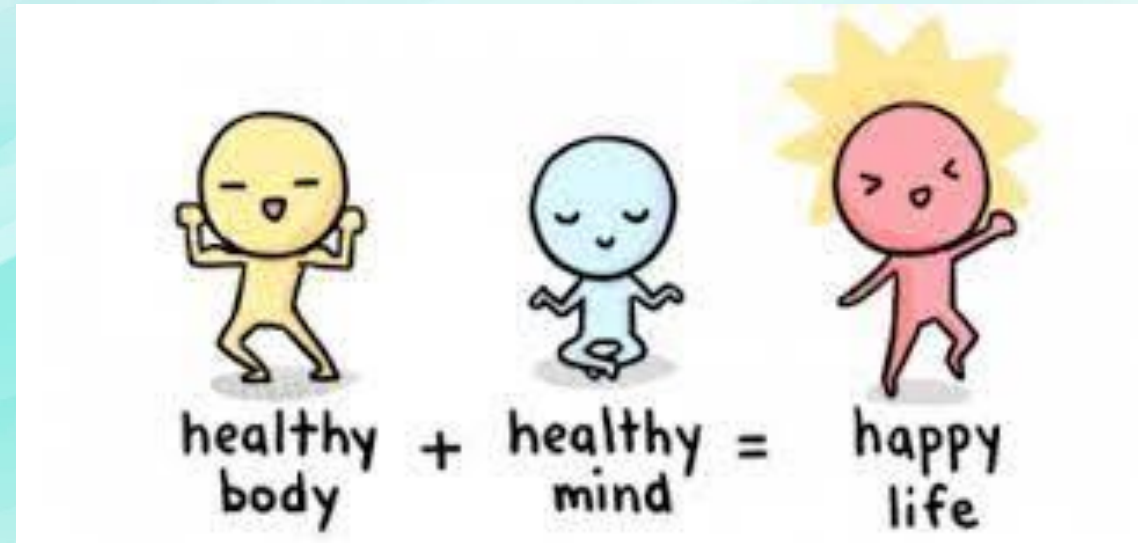
(individual level)

- Continue to set a good example.
- Remember we are all human and could use some help at times.
- Walk at lunch- let them see you move
- Children follow our lead on all our actions from food, to movement, and behaviors.



Summary

WHY DOES IT MATTER?



Medium.com

- Lower occurrence of DM, HTN, Depression, Heart Disease, and more...
 - Confident children, teens, adults
 - Happier Adulthood 😊

L E I G H T V A L L E Y H E A L T H N E T W O R K



Questions?

☐ Email

☐ Call

☐ Text

Nancy Maulick MHS, PA-C

484-241-0506

Nancy_T.Maulick@lvhn.org

Thank you