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Wegovy® (Semaglutide)

Use in Adolescents (Ages 12–17)

A comprehensive guide to the safe and effective use of Wegovy® for adolescents with obesity, as part of a complete care program.

1. FDA-APPROVED PEDIATRIC INDICATION



Wegovy is approved for chronic weight management in:

- Ages: 12–17 years
- BMI: ≥ 95 th percentile for age/sex
- Use: Adjunct to a reduced-calorie diet and increased physical activity

Some guidelines also consider adolescents with:

BMI ≥ 85 th percentile plus a weight-related comorbidity (e.g., insulin resistance, NAFLD, OSA, and hypertension)

2. DOSING SCHEDULE (SAME AS ADULTS, BUT MONITORED MORE CLOSELY)

Weekly subcutaneous injection with gradual titration:



Dose escalation is slowed or paused if GI symptoms are significant.

3. EVIDENCE OF EFFECTIVENESS IN ADOLESCENTS

The pivotal STEP TEENS trial showed:

- ✓ –16.1% mean BMI reduction at 68 weeks vs –0.6% with placebo
- ✓ 73% achieved $\geq 5\%$ weight loss (vs 18% placebo)
- ✓ 62% achieved $\geq 10\%$ weight loss
- ✓ 37% achieved $\geq 20\%$ weight loss
- ✓ Improvements in ALT, A1C, lipids, and waist circumference

Real-world observational data also show:



~6–9% total weight loss at 6–12 months

4. SAFETY PROFILE IN CHILDREN



Common Side Effects

- Nausea
- Vomiting
- Diarrhea
- Abdominal pain



Serious Risks (Less Common)

- Gallbladder disease (4% in trial)
- Pancreatitis (rare; monitor amylase/lipase if symptomatic)
- Hypoglycemia (mainly if combined with insulin/sulfonylureas)
- Potential bone density concerns due to rapid weight loss



Contraindications

- Personal/family history of medullary thyroid carcinoma (MTC)
- MEN2
- Pregnancy (stop ≥ 2 months before conception)

5. MONITORING REQUIREMENTS



Before Starting

- BMI percentile
- Screening for eating disorders
- A1C, fasting glucose
- Lipids
- Liver function
- Gallbladder history



During Treatment

- Weight/BMI every 4–8 weeks
- GI tolerance during titration
- Symptoms of gallbladder disease or pancreatitis
- Mental health screening (body image, mood)

6. CLINICAL PEARLS FOR PEDIATRIC USE



Works best within a multidisciplinary obesity program.



Adolescents often experience more GI side effects than adults.



Weight regain is common if medication is stopped → discuss long-term expectations.



Strong family involvement improves adherence and outcomes.

7. QUICK TEACHING SUMMARY (SLIDE-READY)



Indication: Obesity (BMI ≥ 95 th percentile)



Dose: Weekly injection, titrated to 2.4 mg



Effectiveness: ~16% BMI reduction at 68 weeks



Benefits: Improved metabolic markers



Risks: GI symptoms, gallbladder disease, and rare pancreatitis



Contraindications: MTC, MEN2, pregnancy



Requires: Diet + activity + behavioral support



Wegovy works best as part of a multidisciplinary obesity program

with nutrition, activity, behavioral support, and strong family involvement.



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