

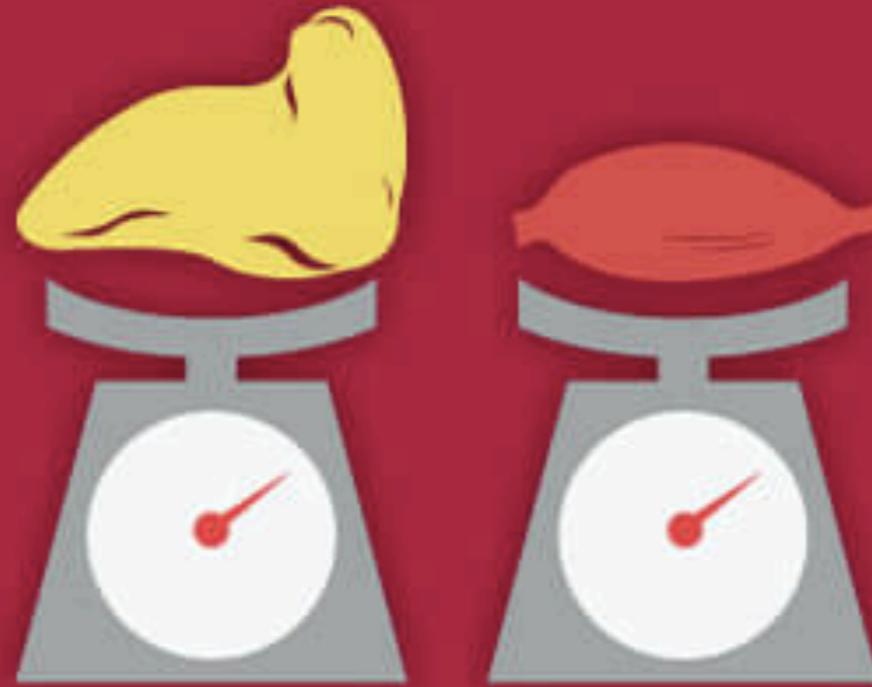


# Fuel it Up

Nutrition Tips for Body Comp and Optimal Performance



Debra Sloan, BSc, RD, CPT



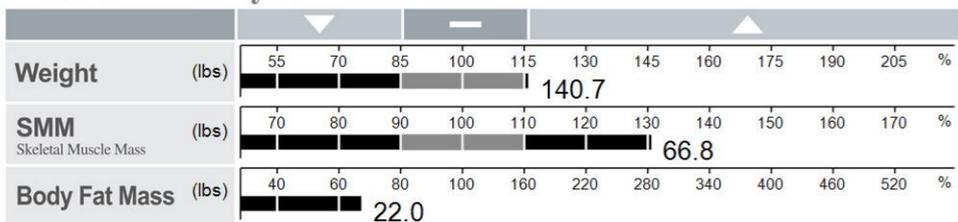
**15 lbs = 15 lbs**

ID 8891	Height 5ft. 03.0in.	Age 36	Gender Female	Test Date / Time 2019.03.29. 09:02
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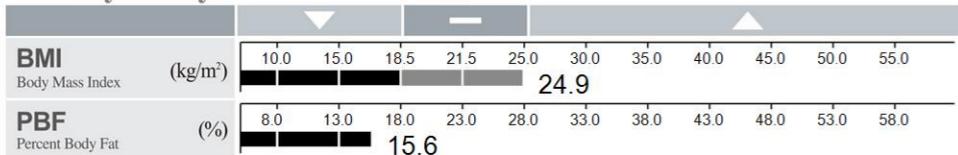
## Body Composition Analysis

Total amount of water in body	<b>Total Body Water</b> (lbs)	86.9
For building muscles and strengthening bones	<b>Dry Lean Mass</b> (lbs)	31.7
For storing excess energy	<b>Body Fat Mass</b> (lbs)	22.0
Sum of the above	<b>Weight</b> (lbs)	140.7

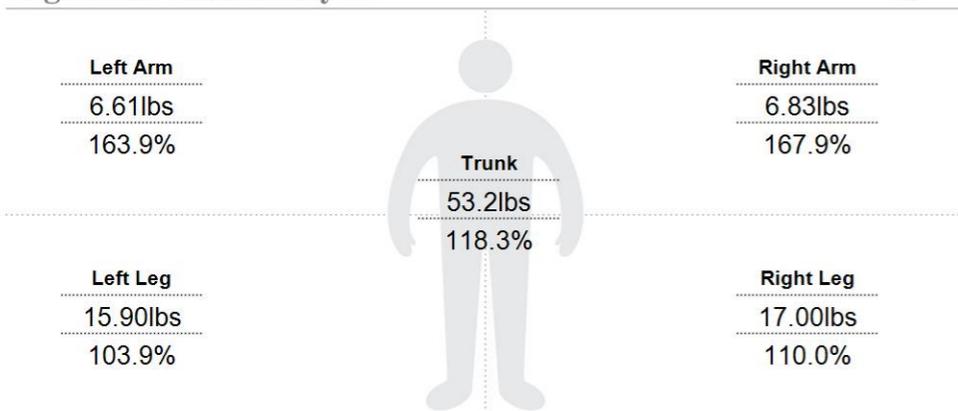
## Muscle-Fat Analysis



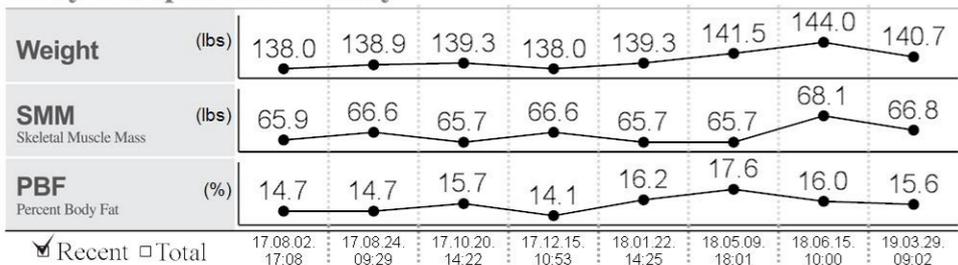
## Obesity Analysis



## Segmental Lean Analysis



## Body Composition History



## Body Fat - Lean Body Mass Control

Body Fat Mass	0.0 lbs
Lean Body Mass	0.0 lbs

(+) means to gain fat/lean (-) means to lose fat/lean

## Basal Metabolic Rate

1532 kcal

## Results Interpretation

### Body Composition Analysis

Body weight is the sum of Body Fat Mass and Lean Body Mass, which is composed of Dry Lean Mass and Total Body Water.

### Muscle-Fat Analysis

Compare the bar lengths of Skeletal Muscle Mass and Body Fat Mass. The longer the Skeletal Muscle Mass bar is compared to the Body Fat Mass bar, the stronger the body is.

### Obesity Analysis

BMI is an index used to determine obesity by using height and weight. PBF is the percentage of body fat compared to body weight.

### Segmental Lean Analysis

Evaluates whether the amount of muscle is adequately distributed throughout the body. Compares muscle mass to the ideal.

### Body Composition History

Track the history of the body compositional change. Take the InBody Test periodically to monitor your progress.

### Body Fat-Lean Body Mass Control

Based on current body composition, the recommended change in Lean Body Mass and Body Fat Mass for a good balanced ratio. The '+' means to gain and the '-' means to lose.

### Basal Metabolic Rate

Basal Metabolic Rate is the minimum number of calories needed to sustain life at a resting state. BMR is directly correlated to Lean Body Mass.

### Results Interpretation QR Code

Scan the QR Code to see results interpretation in more detail.



### Impedance

Z(Ω)	RA	LA	TR	RL	LL
20 kHz	284.8	296.1	17.2	232.7	258.2
100 kHz	248.6	258.7	14.8	198.8	224.5

Dry lean Mass is the weight of you protein and bone mineral content in your body. Doesn't include body water. Gains here often reflective of TRUE muscle gains

Lean body mass: Everything in your body besides your fat **including water**  
(Total weight - Body fat mass lbs = LBM AKA Fat Free Mass)

The percentages mark where you are compared to "normal" or 100% for your height and gender. Follow your bar graphs to see the comparisons. What's your shape?

Skeletal Muscle Mass (SMM) reflects how many lbs of muscle you have, including the fluid in the muscles. Think Biceps, Quads, Glutes etc. Increases here usually indicate TRUE muscle gains.

Segmental Lean Analysis: how much LBM is contained in each segment; not how much "muscle" is in each segment since Lean mass can include fluid as well.

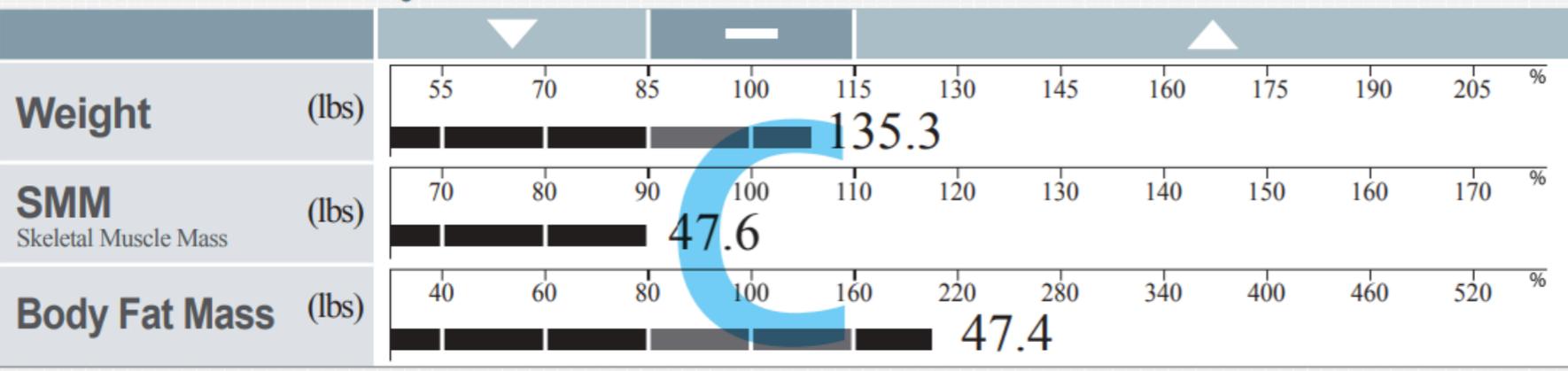
Top bar shows how much LBM in pounds is in a given segment. Always aim to be at 100% or higher

Bottom Bar: Compares LBM against your measured body weight. This shows whether or not you have enough LBM to support your own body weight, where 100% = sufficient

BMR: Did you know 1lb muscle burns 3x as many calories as 1 lb fat? Yes MORE MUSCLE = MORE CALORIES BURNED at REST —> you can EAT MORE FOOD YAYYYYYY!!!

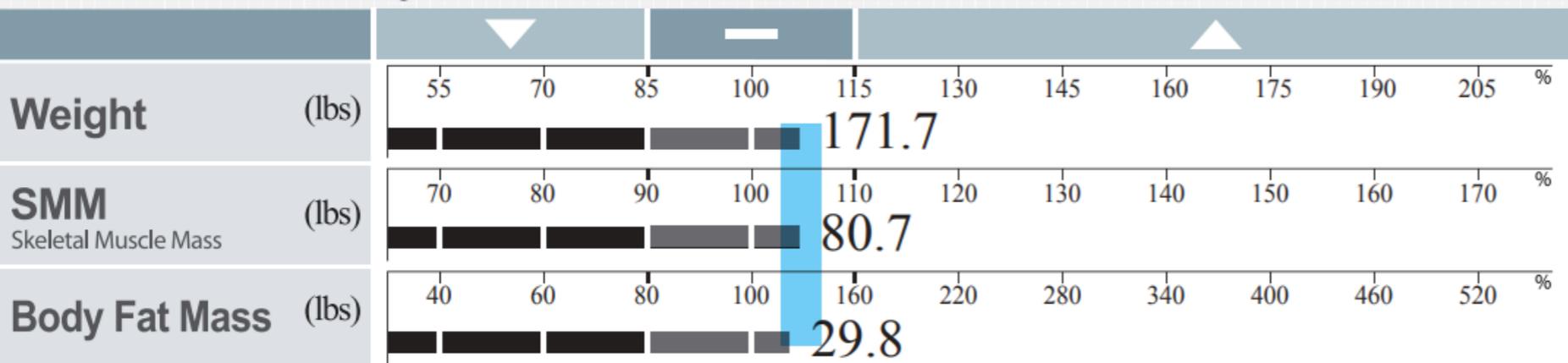
BMR: doesn't include exercise or any AF. This is how much your body needs based on Age, G, Ht, Wt, LBM

# Muscle-Fat Analysis



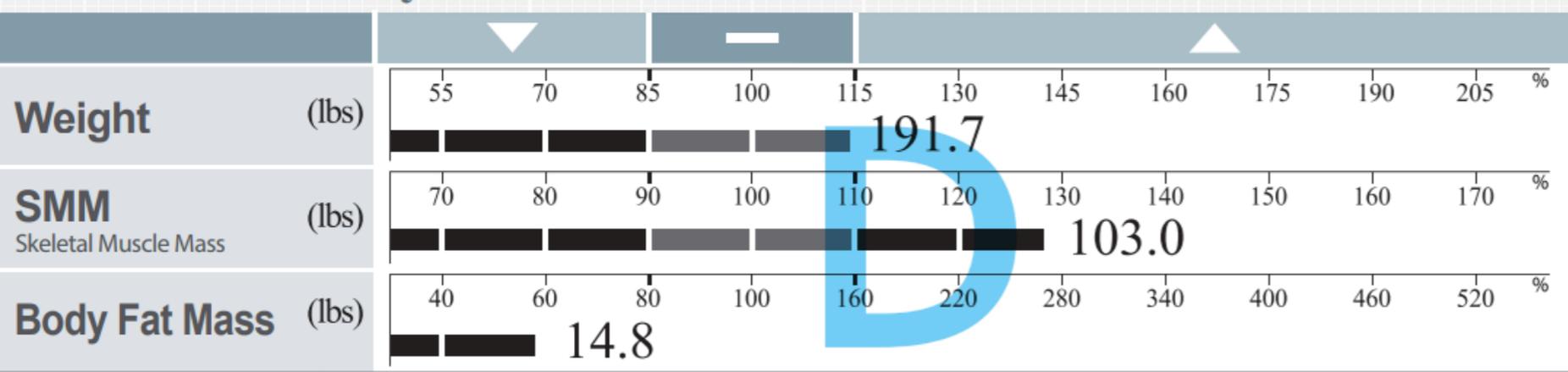
Depending on goals, I or D shaped graphs indicate better health

# Muscle-Fat Analysis



I shaped may be more congruent with Endurance Athletes (who don't want too much mass)

# Muscle-Fat Analysis



D shaped graphs are most ideal. More common for strength/power athletes

# Sport Nutrition Objectives

- OPTIMAL PERFORMANCE
- ENERGY, FUEL, RECOVERY (MACROS)
- NUTRIENT TIMING
- HYDRATION
- MUSCLE and STRENGTH GAINS
- HEALTH, DEFICIENCY, IMMUNE FUNCTION, DECREASE INFLAMMATION (MICRONUTRIENTS)

# TOP 5 TIPS for BODY COMP and OPTIMAL PERFORMANCE

1. Energy Balance + Diet Quality

2. Assess your Macros

3. Nutrient Timing

4. Build Muscle

5. Recovery Practices

# TIP 1: ENERGY BALANCE

- Less isn't always better
- For athletes It's important to find the balance to match your activity.
- QUALITY of food. Maximize variety and micronutrients (healing, immunity, inflammation)
- Also, your best weight isn't always your lowest weight !
- DO portion control to make sure you're not OVER fuelling, Hunger Mngmt? Also DON'T restrict too much
- Restricted calorie diets in active individuals —> poor recovery, risk of injury, stalled metabolism and performance, breakdown muscle, prevent body comp change

# TIP 2: ASSESS MACROS

- Maintain a **High Protein Diet** (High quality, Well distributed, Meet daily totals, Timed well).
- Why? Protein Incr Metabolism, Satiating, Prevents MPB, Incr MPS, Has a higher Thermogenic effect, facilitates recovery, We need more as we age
- Good standard ~ 1g protein/lb body weight . 20g every 3-4 hrs
- Eat **Good Carbs** (fuel your body with carbs for performance, protects muscle, allows for increased calorie burn, speed, recovery, lowers total body cortisol)
- Following Sport Specific, Body Specific, Age Specific, Goal Specific Macro Nutrient intake? If not Let's TALK!

# TIP 3: NUTRIENT TIMING + HYDRATION

- Fuel and Recovery food timed well and with intention around workouts to perform,
- Poor nutrient timing —> no gains, incr body stress response —> cortisol breakdown muscle rather than build and potentially store fat
- Insufficient hydration (e, fluids) —> dec performance FAST
- 25 g Good quality protein (high leucine is best) within 30min-1 hour post training
- Carbs should be part of this routine before, after, during and in sufficient amounts on a daily basis esp around race prep
- Typically within 1 hour of training, Macro specific to tolerance, type, volume, duration

# TIP 4: BUILD MUSCLE

- Cardio is great and important for your training: It burns calories, but stops when you stop, it also uses muscle vs builds
- Muscle burns more calories, allows us to hold more fluid and glycogen (Yay for this on long runs). AKA Helps with Body comp
- Functional muscle allows us to improve performance, prevent injury.
- Do lift heavy to fight the natural/hormonal process of aging —> muscle catabolism and decreased metabolic rate. Women need this even more than men!

# TIP 5: RECOVERY PRACTICES

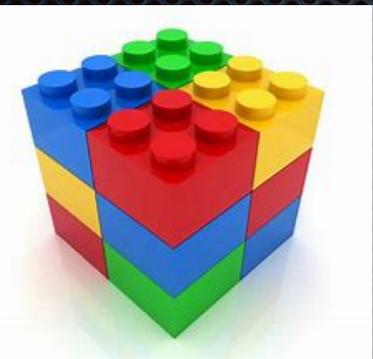
- More is NOT always BETTER
- Take rest days to allow for muscle and training adaptations .
- Too much —> elevated cortisol or neuromuscular fatigue —> ESPECIALLY if combined with improper/insufficient nutrient intake/timing. —> performance regression, body comp stagnation, injury
- Assess sleep - lack of sleep is associated with poor recovery, inability to perform, AND lead to weight gain. MAGNESIUM?
- Stress levels - another one that impacts hormones and can impact all of the above.

# MACROS and SPORT



**Carbohydrate** = Glucose = Sugar = Glycogen = **FUEL**

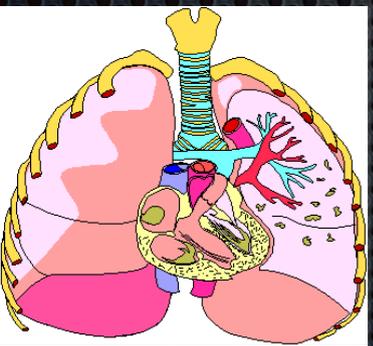
- ✦ Stored glycogen: Muscle and Liver → enough for 90 mins higher intensity training
- ✦ Higher the intensity and duration the more reliance on Carb



**Protein**

Current evidence shows the Fuel of Choice for Sport Performance is **Carbohydrate**

Guruperformance  
Trent Strellingworth  
Stu Phillips  
Louise Burke  
Brad Schoenfeld  
Alan Aragon  
Stacy Sims



**Fat**

**ESPECIALLY FEMALE ATHLETES**

# 4 Tiers of Athlete Fuelling

Supplements

Sport Nutrition/Macros/  
Nutrient Timing:

Protein, Carbs, Healthy Fats,  
Electrolytes, Fuel, Recovery

Cooking and Meal Prep:

Putting together meals, snacks,  
picking foods, labels

General Healthy Eating:

Balanced, Whole Foods, Micronutrients, Variety, Meeting Energy Needs (\*plants, \*quality proteins, \*fluids, \*healthy fats, \*complex carbs)

# Power Snacks

## 1 Hr Pre-Training



< 2-3 hours Balanced Meals



Easy to digest

Low in fat and fibre



**Complex carbs (15-75g)**

Some protein (8-20g)

**Fluids (250-500ml)**



Less time = Less Complex

# During

< 30 mins/during Training/Races

- WATER
- Hydration
- (>60-75 mins e-replacement, glucose, fluid, BCAA)
- Easy to digest. Known foods only
- Hydration, carb and fuel replacement DURING workouts



## MAKE YOUR OWN SPORTS DRINK

ALL YOU NEED ARE  
3 INGREDIENTS  
IN THE RIGHT  
PROPORTION



1. FLUID  
to rehydrate  
WATER  
500 ml

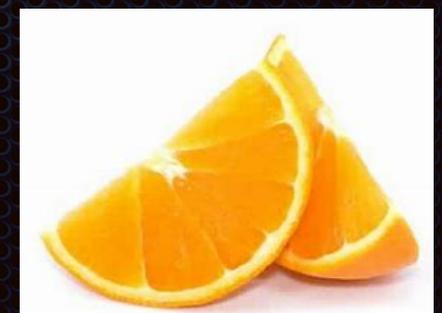
2. CARBOHYDRATES  
for energy

REAL  
FRUIT  
JUICE  
500 ml



3. ELECTROLYTES  
for lost sodium  
& potassium

A PINCH  
OF SALT



# Recovery

## 1 Hr Post Training

- ✦ **Carbs + Protein**
- ✦ Good source of protein (15-40g)
- ✦ Easy to digest. Low in fat and fibre
- ✦ **Fluids (250-500 ML)**
- ✦ Time Sensitive
- ✦ Multiple workouts = > CARBS and sooner to workout completion



# Breakfast of champions



### Smoothie:

- 1 Protein: Greek yogurt/Protein powder/Egg whites/milk/soymilk
- 2 Carbs: 2 servings fruits, flavoured yogurt, juice, oats, dates
- 1 tbsp healthy fat (flax, hemp, nut butter, avocado)
- Micronutrient booster: Kale, spinach



### Cottage Cheese Breakie Bowl:

- 3/4 cup cottage cheese
- Granola mix with dried fruits, nuts, oats
- Colourful fruits (berries, banana, apple)



- Oatmeal, Overnight
- Oats or baked Oatmeal
- 1 cup cooked oats
- Fruit toppings
- dates
- Flax,nuts,seeds,Nut butter
- egg whites/protein/yogurt



### Pancakes/Muffin with Yogurt bowl

- 2-3 Healthy Pancakes or Muffins or breakfast cookies or PBB sandwich
- 1/2 cup yogurt with fruit

### Fuel/Hydration Tips:

- To boost quick carbs add 1 cup 100% Fruit Juice/small fruit smoothie
- To boost protein add 1 cup Milk/Soy

# Questions Comments Contact

Debora Sloan



Healthy Solutions



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