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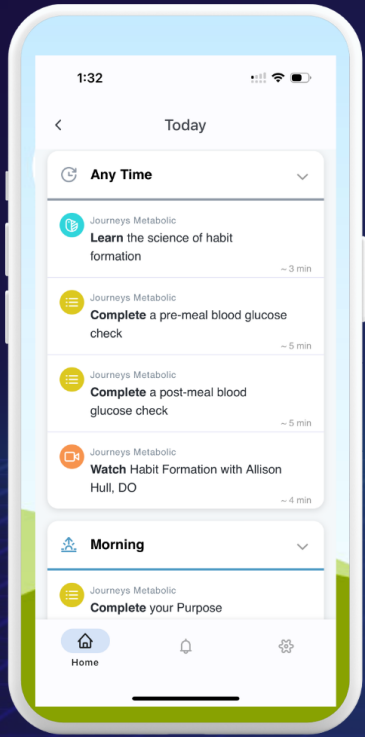


CLINICAL PROTOCOL

- 4- month, evidence-based behavior modification protocol utilizing nutrition as metabolic therapy.
- Intentional. Incremental. Multi-disciplinary.
- Prescriptive protocol driven by diagnosis, motivators, readiness, and health literacy.



Month 1: The Foundations



Self Discovery



Purpose + identity
Desired Identity
Mindfulness

Education



Carbohydrate modification
Glucose measurement
Habit formation

Action Plan



Nutrition:

3 servings of healthy fats
4 servings of non-starchy vegetables
1-2 servings of fermented foods
100g Net Carbs
64-80 oz of water daily (restrict if applicable)

Behavior:

Connect dopamine to new habits
Experiment w/ extrinsic motivators + rewards
Practice self-compassion + altruism

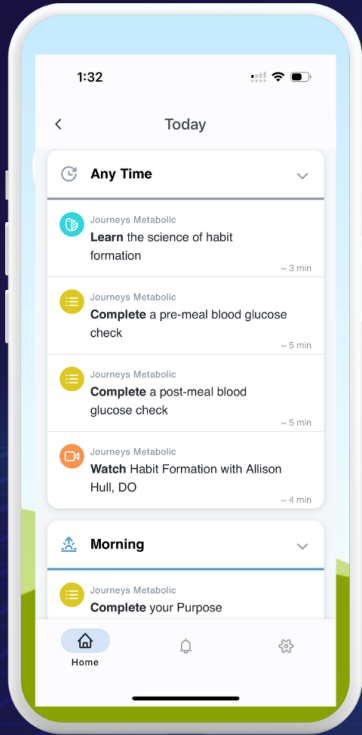
Self-Reporting

- *Assessments:* PHQ-9, GAD-7, Self-Compassion, Well-Being Survey, Sleep.

- *Biometrics:* Weight, BP, Fitness minutes.
Optional Lab values: A1C, AST and ALT, lipid panel, ApoB and Fasting Insulin (if available).

Glucose monitoring (POC glucose levels)

Month 2: The Journey



Self Discovery



Building grit
Somatic Awareness
Short + long term goal setting
Power of the post-meal walk
Purpose + identity
Metrics = long-term success

Education



Mitochondrial health
Fat oxidation
Metabolic flexibility
Hunger hormones

Action Plan



Nutrition Tracking

Consume 4 servings of healthy fats
Consume 6-8 servings of non-starchy vegetables
Consume 1-2 servings of fermented foods
Drink 64-80 oz of water daily (restrict if applicable)
Protein and fat goals identified
Net carbohydrates continue to change.

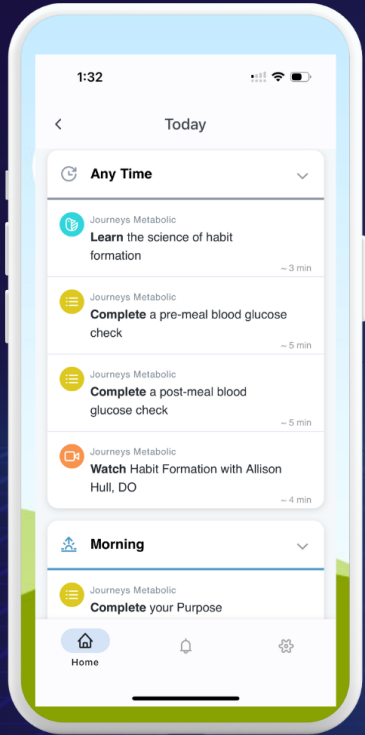
Behavior:

Diaphragmatic breathing
Thought distancing
Visualization
Self-compassion and altruism

Self-Reporting

Total body weight
Fitness minutes
Glucose monitoring (POC glucose levels)
Biosense device daily testing (ACE levels)

Month 3: Endurance Training



Self Discovery

Progressive muscle relaxation
Practicing gratitude
Positive self-talk
Thought distancing
Visualization
Self-compassion and altruism
Purpose + Identity

Education

Autophagy
Carbohydrate modification
Customizing nutrition
w/ biomarkers
Meal prep
Time-Restricted Feeding
Glycemic index (Focus 5)
Exercise + connection w/glucose,
telomeres, fat oxidation, and
overall metabolic improvement

Action Plan

Nutrition Tracking

Consume 4 servings of healthy fats
Consume 6-8 servings of non-starchy vegetables
Consume 1-2 servings of fermented foods
Drink 64-80 oz of water daily (restrict if applicable)
Protein and fat goals identified
Net carbohydrates continue to change.

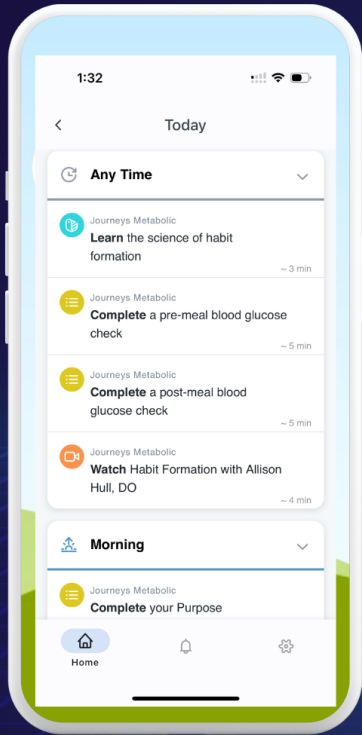
Behavior:

Diaphragmatic breathing 5 min a day
Time-restricted feeding x 12-14 hours
Connect dopamine to new habits
Experiment w/ extrinsic motivators + rewards

Self-Reporting

Total body weight
Fitness minutes
Glucose monitoring (POC blood glucose levels)
Biosense device daily testing (ACE levels)

Month 4: The Transition From Learning To Living



Self Reporting (Post Program)

Total body weight
Blood Pressure
Fitness minutes
Glucose monitoring (POC blood glucose)
Biosense device daily testing (ACE levels)
Optional Lab values: A1C, Lipid panel, ApoB, AST and ALT, eGFR, Fasting Insulin.

Self Discovery



Leadership > long-term success
Detailed lab changes
Change awareness
Music as medicine
Power of nature
Progressive Muscle Relaxation
Gratitude
Positive self-talk
Thought distancing
Visualization
Self-compassion and altruism

Education



Sleep
Sugar + substitutes
Carbohydrate threshold to sustain long-term success

Action Plan



Nutrition Tracking

Consume 4 servings of healthy fats
Consume 6-8 servings of non-starchy vegetables
Consume 1-2 servings of fermented foods
Drink 64-80 oz of water daily (restrict if applicable)
Protein and fat goals identified
Net carbohydrates continue to change

Behavior (Post Program)

Post Program Assessments.
Non-scale victories
Time-Restricted Feeding x 16-18 hours

Movement daily. Goal is >150 min/wk, including both aerobic and resistance
Diaphragmatic Breathing up to 15 min/day

Lead the way: Identify at least 2 individuals to encourage and share knowledge/experience with to better to ensure long-term success

PROTOCOL OUTCOMES SINCE 2018



8%
Body weight
reduction*

\$157 PPPM cost savings
with 5-10% reduction ⁽¹⁾

17%
HbA1c
reduction

\$503 PPPM cost savings
with virtual clinics with
similar reduction ⁽²⁾

8%
SBP
reduction

5 mmHg reduction
lowers CV event by
10% ⁽³⁾

30%
Triglyceride
reduction

Associated with lower
risk of vascular events
⁽⁴⁾

54%
NAFLD
resolution**

\$878,400 cost of liver
transplant ⁽⁵⁾

Reduction in
PHQ-9 (mood
improvement)**

\$4,356 higher annual
medical costs with
moderate to severe
medical symptoms ⁽⁶⁾

Reduction in
GAD-7 (less
anxiety)**

Diagnosed employees
have \$1,555 higher
annual medical costs &
\$1,366 higher
productivity costs ⁽⁷⁾

Reduction in
PSQI (better
sleep)**

\$5,010 higher annual
cost for patients with
insomnia syndrome, 76%
due to absence and
productivity ⁽⁸⁾

*>3,000 patients completed legacy program to date.
Outcomes represent n=250, ages 25-82, pre-program A1c 5.4-9.0%
*Whole body weight reduction 2.2 years post-program
**Partnered research, USF and Levels Health with legacy program, 2021
N=57, Ages 22-68, Pre-study Mean A1c 5.5, Pre-study BMI 26-42*

Case Studies

Patient: Dave C., 77 yo male
(sustained results x 4 years post program)

Total Body Weight loss: 80 lbs (25% reduction)

HbA1c: 6.8 > 5.0 (26% reduction)

Fasting Blood Glucose: 142 > 92 (35% reduction)

BP: 148/81 > 110/71 (26% reduction in SBP)

NAFLD: Stage 3 > Stage 0 (resolution via US imaging)

“I no longer need a seat belt extension on an airplane.”

***“I never thought I could live life without craving sweets,
now
they make me physically sick.”***



Case Studies

Patient: Catherine S., 58 yo female
(sustained results x 2.5 years post program)

Total Body Weight loss loss: 41 lbs (19% reduction)

Fasting Insulin: 22 > 5 (77 % reduction)

HbA1c: 5.8 > 5.2 (10% reduction)

Triglycerides: 134 >71 (47% reduction)

BP: 131/88 > 114/70 (13% reduction in SBP)

NAFLD: Stage 2 > Stage 0 (resolution via US imaging)

“My wedding ring finally fits again.”

“I feel like me more than ever before! I now have the skills and confidence to live a healthy life.”



Case Studies

Patient: James B., 42 yo male
(sustained results x 3.5 years post program)

Total Body Weight loss: 76 lbs (31% reduction)

HDL chol: 38 < 71 (46% increase)

Non-HDL chol: 140 >125 (11% reduction)

HbA1c: 5.7 > 5.2 (9% reduction)

Triglycerides: 192 > 66 (65% reduction)

BP 147/102 > 122/78 (17% reduction in SBP)

"I can now lead my son with pride as his father."

"I am stronger both physically and mentally than I have ever been in my life."





THANK YOU!

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REFERENCES

1. Ding Y, Fan X, Blanchette CM, Smolarz BG, Weng W, Ramasamy A. Economic value of nonsurgical weight loss in adults with obesity. *J Manag Care Spec Pharm*. 2021 Jan;27(1):37-50. doi: 10.18553/jmcp.2020.20036. Epub 2020 Nov 9. PMID: 33164723.
2. Hallberg SJ, McKenzie AL, Williams PT, Bhanpuri NH, Peters AI, Campbell WW, Hazbun TL, Volk BM, McCarter JP, Phinney SD, Volek JS. Effectiveness and Safety of a Novel Care Model for the Management of Type 2 Diabetes at 1 Year: An Open-Label, Non-Randomized, Controlled Study. *Diabetes Ther*. 2018 Apr;9(2):583-612.
3. Canoy D, Nazarzadeh M, Copland E, Bidel Z, Rao S, Li Y, Rahimi K. How Much Lowering of Blood Pressure Is Required to Prevent Cardiovascular Disease in Patients With and Without Previous Cardiovascular Disease? *Curr Cardiol Rep*. 2022 Jul;24(7):851-860. doi: 10.1007/s11886-022-01706-4. Epub 2022 May 7. PMID: 35524880; PMCID: 10111886.
4. Cardiovascular Risk Across Multiple Lipid-Lowering Therapeutic Classes: A Systematic Review and Meta-Regression Analysis of Randomized Controlled Trials. *Circulation*. 2019 Oct 15;140(16):1308-1317. doi: 10.1161/CIRCULATIONAHA.119.041998. Epub 2019 Sep 18. PMID: 31530008; PMCID: PMC6791781.
5. Allen AM, Van Houten HK, Sangaralingham LR, Talwalkar JA, McCoy RG. Healthcare Cost and Utilization in Nonalcoholic Fatty Liver Disease: Real-World Data From a Large U.S. Claims Database. *Hepatology*. 2018 Dec;68(6):2230-2238. doi: 10.1002/hep.30094. Epub 2018 Sep 20. PMID: 29774589; PMCID: PMC6240503.
6. Bently, T. Scott, 2020 U.S. organ and tissue transplants: Cost estimates, discussion, and emerging issues; Milliman Research Report, January, 2020
7. Marciniak M, Lage MJ, Landbloom RP, Dunayevich E, Bowman L. Medical and productivity costs of anxiety disorders: case control study. *Depress Anxiety*. 2004;19(2):112-20. doi: 10.1002/da.10131. PMID: 15022146.
8. Daley M, Morin CM, LeBlanc M, Grégoire JP, Savard J. The economic burden of insomnia: direct and indirect costs for individuals with insomnia syndrome, insomnia symptoms, and good sleepers. *Sleep*. 2009 Jan;32(1):55-64. PMID: 19189779; PMCID: PMC2625324.