

# Behaviors and characteristics of current and previous users of Glucagon-Like Peptide-1 Receptor Agonists (GLP-1) in an online health community

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## Background

- Glucagon-like peptide-1 (GLP-1) receptor agonists have emerged as a promising tool for weight management.<sup>1</sup>
- Recent research suggests that GLP-1 agonists, when combined with other weight loss programs, may offer a more robust and sustainable approach to achieving and maintaining healthy body weight.<sup>2</sup>

## Objectives

- This analysis examines the behaviors and characteristics associated with current versus previous GLP-1 users.

## Methods

### STUDY POPULATION

- 109,126 US adults from an online community responded to a survey on their experiences with weight management strategies in October 2023.
- They were asked about weight management tools such as dieting, exercise, food diaries, in-person and on-line support programs, oral prescription medication, and injectable prescription medication.

### DESCRIPTIVE ANALYSIS

- Individuals were classified as never, current or previous users of GLP-1 medications and compared across weight status, demographic characteristics, and their weight management strategies.

## References

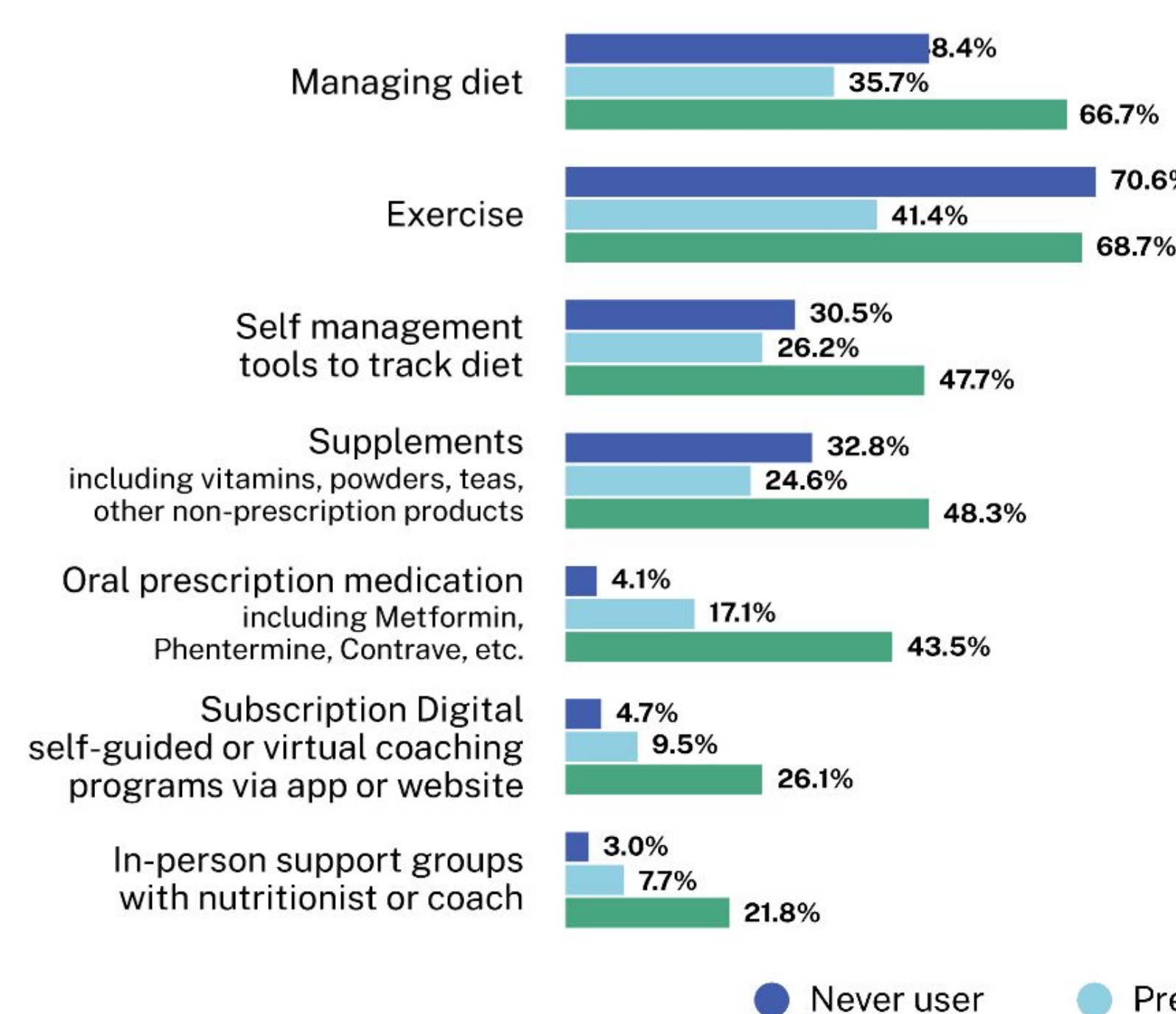
1. Chakhtoura M, Haber R, Malak Ghezzawi, Caline Rhayem, Raya Tcheroyan, Mantzoros CS. Pharmacotherapy of obesity: an update on the available medications and drugs under investigation. 2023;58:101882-101882. doi: <https://doi.org/10.1016/j.eclinm.2023.101882>
2. Ryan, D. H., et al. (2023). Combined GLP-1 medication and virtual coaching leads to sustained weight loss. Presented at Obesity Week. [Abstract retrieved from Cleveland Clinic Journal of Medicine, <https://www.ccm.org/page/obweek-2023/GLP-1-weight-loss>]

## Results

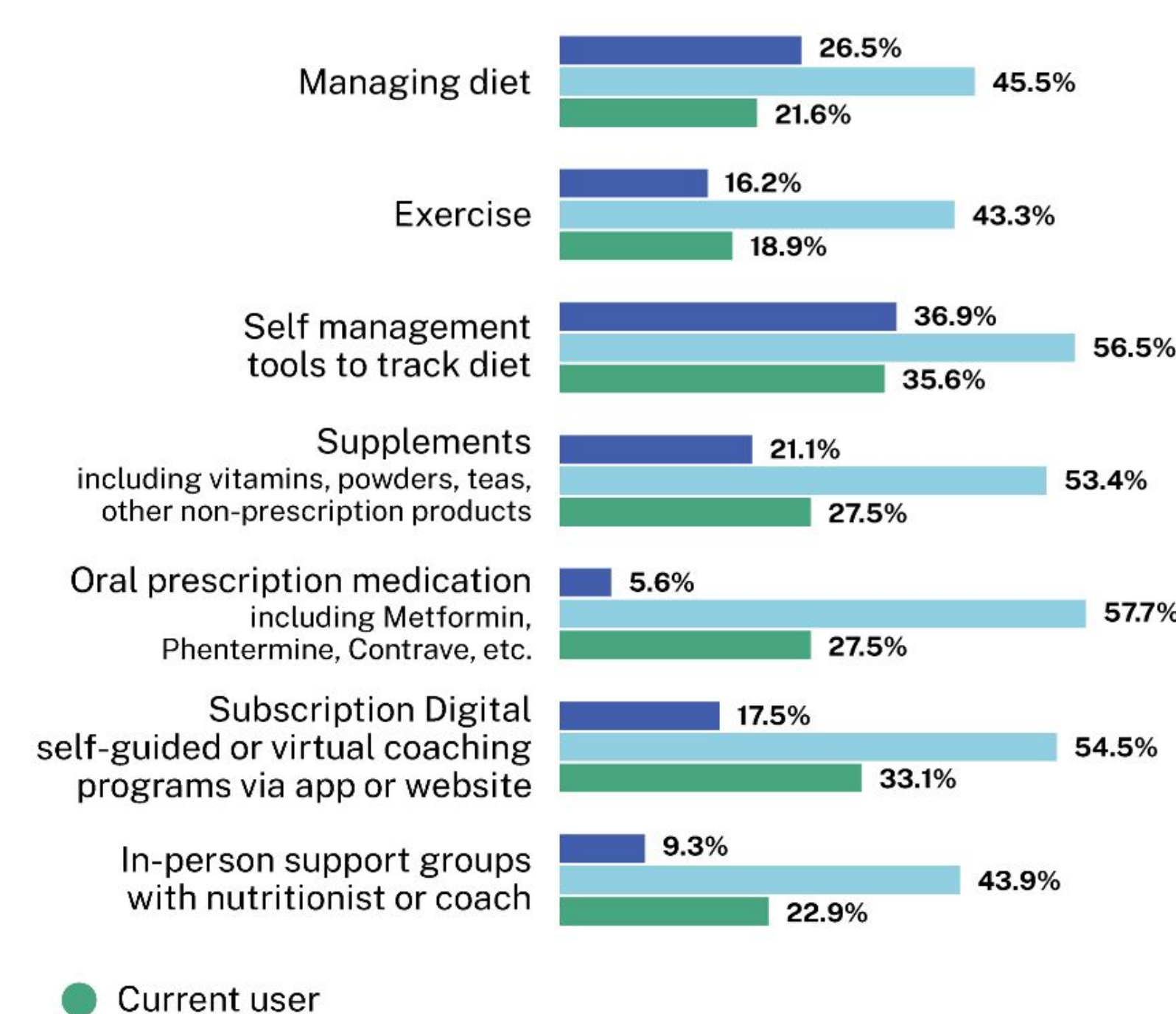
### STUDY POPULATION

Baseline Characteristics		Never user N = 109126	Previous user N = 4237	Current user N = 5651	P
Age	Mean years (SD)	40.37 (12.39)	39.98 (10.95)	42.85 (11.28)	<0.001
	Female, n (%)	84310 (77.3)	3216 (75.9)	4459 (78.9)	
Education (%)	Graduate/Professional Degree	27646 (25.3)	929 (21.9)	1366 (24.2)	<0.001
	College Degree	49273 (45.2)	1710 (40.4)	2387 (42.2)	
	Other (High school, GED, trade school, other)	32208 (29.5)	1598 (37.6)	1898 (33.5)	
Income (%)	Less than \$25,000	6686 (6.1)	304 (7.2)	283 (5.0)	<0.001
	\$25,000- \$49,999	15,329 (14.1)	709 (16.8)	774 (13.7)	
	\$50,000- \$99,999	32,372 (29.7)	1261 (29.8)	1781 (31.5)	
	\$100,000- \$149,999	19,399 (17.8)	689 (16.3)	1036 (18.3)	
	\$150,000 or more I prefer not to answer	13,467 (12.3) 21,873 (20.0)	462 (10.9) 812 (19.2)	772 (13.7) 1005 (17.8)	
Non-Hispanic White	82212 (75.3)	2888 (68.2)	4079 (72.2)	<0.001	
Private Insurance (%)	79242 ( 76.7)	2532 ( 63.7)	4071 ( 75.1)	<0.001	
BMI (%)	Underweight	1139 ( 1.0)	62 ( 1.5)	60 ( 1.1)	0,274
	Normal	36470 (33.4)	760 (17.9)	993 (17.6)	
	Overweight	34441 (31.6)	1138 (26.9)	1562 (27.6)	
	Obese	37076 (34.0)	2277 (53.7)	3036 (53.7)	
Satisfaction with weight (%)	Very satisfied	5190 ( 4.8)	138 ( 3.3)	273 ( 4.8)	<0.001
	Satisfied	21312 (19.5)	648 (15.3)	1051 (18.6)	
	Neither satisfied nor dissatisfied	18934 (17.4)	930 (21.9)	974 (17.2)	
	Dissatisfied	41595 (38.1)	1355 (32.0)	2036 (36.0)	
	Very dissatisfied	22095 (20.2)	1166 (27.5)	1317 (23.3)	
Actively managing weight in the past 6-months (%)	Yes, I was/have been focused on losing weight.	65930 (60.4)	2612 (61.6)	4472 (79.1)	<0.001
Current weight management goal (%)	Trying to lose 10+ pounds (%)	56328 (51.6)	2452 (57.9)	3942 (69.8)	<0.001
	Trying to lose 1-9 pounds (%)	25409 (23.3)	775 (18.3)	832 (14.7)	<0.001
	Trying to tone or build muscle (%)	46786 (42.9)	1266 (29.9)	1790 (31.7)	0,059
	Trying to maintain current weight/size (%)	15390 (14.1)	513 (12.1)	676 (12.0)	0,851
Currently diagnosed OR taken prescription medications OR taken supplements in the past 6 month (%)	Type 2 diabetes (%)	3320 ( 3.0)	850 (20.1)	1589 (28.1)	<0.001
	Pre-diabetes (%)	5773 ( 5.3)	899 (21.2)	1024 (18.1)	<0.001
	High cholesterol (%)	17679 (16.2)	1323 (31.2)	1774 (31.4)	0,876
	High blood pressure (%)	16152 (14.8)	1323 (31.2)	1816 (32.1)	0,347
	Anxiety (%)	39123 (35.9)	2208 (52.1)	2506 (44.3)	<0.001
	Depression (%)	29429 (27.0)	1860 (43.9)	2041 (36.1)	<0.001
	Loneliness or isolation (%)	15971 (14.6)	1226 (28.9)	1083 (19.2)	<0.001
	Perimenopause (%)	7629 ( 7.0)	986 (23.3)	787 (13.9)	<0.001
	Menopause (%)	8375 ( 7.7)	923 (21.8)	885 (15.7)	<0.001
	Pregnancy (%)	5204 ( 4.8)	717 (16.9)	385 ( 6.8)	<0.001
	Type-1 diabetes (%)	1863 ( 1.7)	649 (15.3)	455 ( 8.1)	<0.001
	Nonalcoholic steatohepatitis (NASH) or Nonalcoholic Fatty Liver Disease (NAFLD) (%)	2194 ( 2.0)	657 (15.5)	524 ( 9.3)	<0.001
	Cardiovascular disease (%)	2693 ( 2.5)	600 (14.2)	442 ( 7.8)	<0.001
	Cancer (%)	2245 ( 2.1)	539 (12.7)	357 ( 6.3)	<0.001
	Trouble sleeping (%)	33969 (31.1)	1585 (37.4)	1967 (34.8)	0,008
	Sleep apnea (%)	6562 ( 6.0)	822 (19.4)	953 (16.9)	0,001
Arthritis or joint pain (%)	20771 (19.0)	1231 (29.1)	1399 (24.8)	<0.001	
Thyroid disease (%)	9599 ( 8.8)	952 (22.5)	934 (16.5)	<0.001	

Currently active weight management approach (%)



Previously tried weight management approach (%)



## Discussion

- 9888 (10%) used or are using GLP-1 medications to manage their weight.
- Users are more likely to be Black (11.7%) or Hispanic (11.5%), versus never users (4.2%, 5.0%), respectively.
- Compared to previous users, current users are more likely to have private insurance (75.1% vs. 63.7%) and focus on losing >10 pounds (69.8% vs. 57.9%) in the past 6 months.
- Previous users are less likely to be actively using diet, exercise, self management tools, oral prescription medication, and subscription digital or in-person support groups to manage their weight, but are more likely to report having tried those same weight management tools in the past, a concern given (32%) are still dissatisfied and (27.5%) are very dissatisfied with their weight; half of previous users (53.7%) have a BMI that classifies them as obese.

## Conclusions

- Our findings suggest that insurance coverage may play a crucial role in determining access to GLP-1 medications.
- Beyond access, future research should prioritize investigating the obstacles to accessing and maintaining weight management strategies that are crucial for patients using GLP-1 medications ensuring that patients can sustain these strategies after they discontinue GLP-1 medication use.



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