



## PATH TO PEPTIDES GLP-1 AND YOUR LIVER: THE MASH BREAKTHROUGH

Fatty liver disease affects 1 in 3 adults. Semaglutide just became the first GLP-1 approved to treat it.

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FOR RESEARCH AND EDUCATIONAL PURPOSES ONLY

# THE SILENT EPIDEMIC IN YOUR LIVER

There's a disease affecting roughly 100 million Americans that most people have never heard of. It's called MASH — metabolic dysfunction-associated steatohepatitis. In plain English: your liver is inflamed and scarring because of fat buildup.<sup>1</sup>

Until recently, there was almost nothing doctors could prescribe for it. In August 2025, the FDA approved Wegovy as the first GLP-1 to treat MASH — and the results from the ESSENCE trial are remarkable.<sup>2</sup>

## ESSENCE TRIAL RESULTS

62.9% of patients on semaglutide had their liver inflammation resolve — compared to just 34.3% on placebo. And 37% saw their liver scarring (fibrosis) improve.<sup>2</sup>

# WHAT IS MASH?

Think of your liver as a processing plant. It handles everything you eat and drink. When too much fat builds up, it's like the plant getting clogged. First comes inflammation (the plant overheating). Then scarring (the plant breaking down). Eventually, this can lead to liver failure or liver cancer.<sup>3</sup>

MASH is closely linked to obesity, diabetes, and metabolic syndrome. About 1 in 3 adults have some degree of fatty liver disease. Of those, about 20% progress to MASH with scarring.<sup>1</sup>

# HOW GLP-1 HELPS THE LIVER

GLP-1 medications help the liver in multiple ways: they reduce fat buildup by improving how the body processes sugar and fat, they calm inflammation, and they appear to slow or reverse scarring. Importantly, some of these benefits seem to happen independently of weight loss — meaning the drug has direct protective effects on liver tissue.<sup>4</sup>

Drug	Trial	MASH Resolution	Fibrosis Improvement
Semaglutide 2.4mg	ESSENCE	62.9%	37.0%
Tirzepatide	SYNERGY-NASH	74% (highest dose)	47%
Survodutide	Phase 2	64%	36%
Placebo	Various	~22-34%	~15-22%

## THE BOTTOM LINE

MASH is the fastest-growing cause of liver transplants. GLP-1 medications now offer real hope. Semaglutide is the first GLP-1 FDA-approved for MASH with moderate to advanced fibrosis. If you have risk factors like obesity, diabetes, or abnormal liver tests, talk to your doctor about screening.

## REFERENCES

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## **FOR RESEARCH AND EDUCATIONAL PURPOSES ONLY**

This document is intended solely for educational purposes to increase awareness of emerging scientific research. It does not constitute medical advice.

**Regulatory Status:** Semaglutide (Wegovy 2.4 mg SC) received FDA Accelerated Approval for noncirrhotic MASH with moderate to advanced fibrosis (F2-F3) in August 2025. Full approval is contingent on confirmatory trial results.

All healthcare decisions should be made in consultation with qualified medical professionals.

