



## Sustained Release Vitamin C Tablets

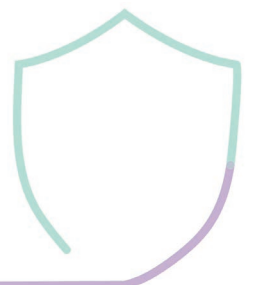
Enable your consumers to  
**strengthen their immune health**

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Carbopol® polymers are reliable, proven tools for creating high-value nutraceutical products.

Sustained release vitamin C tablets formulated with Carbopol polymers offer immune/antioxidant support, plus key features and benefits for consumers:

- **Smaller, easier-to-swallow** tablets
- **Optimized delivery** (up to 12 hours *in vitro*)
- **Extended absorption window** for improved uptake
- **Consistent dosing** from tablet-to-tablet



# Vitamin C Sustained Release Tablets with Carbopol Polymers

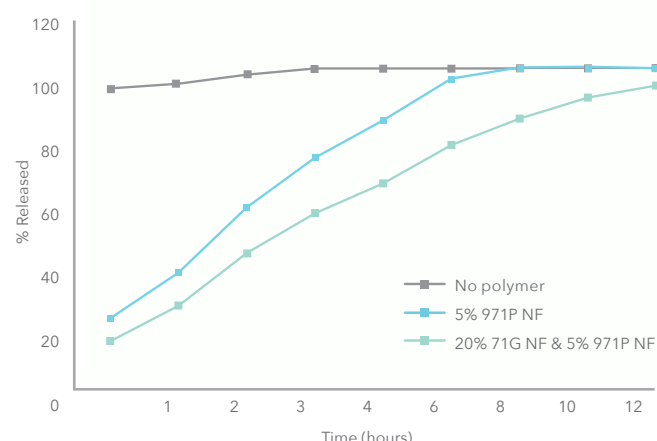
## Materials and Methods

Property	Value
Sustained Release Polymers	Carbopol® 971P NF Polymer Carbopol® 71G NF Polymer
Carbopol Polymer Inclusion Level	5 to 25%
Vitamin C Strength	500 mg
Manufacturing Method	Direct Compression

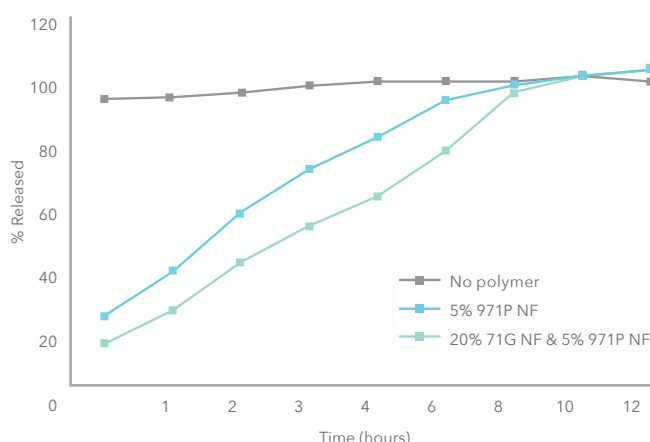
## Results

- Carbopol Polymers enabled **8 to 12 hours of *in vitro* vitamin C release**
- Results achieved with **as little as 5% Carbopol polymer**
- Addition of extragranular Carbopol 71G polymer **provided better sustained release**
- Good control over release was demonstrated at **500 mg dose in all media tested**

 **Figure 1. Vitamin C release from 500 mg dose tablets in 0.1N HCl (Stomach)**



 **Figure 2. Vitamin C release from 500 mg dose tablets in pH 6.8 buffer (Intestine)**



Start your project today

Visit [go.lubrizol.com/CarbopolForNutra](https://go.lubrizol.com/CarbopolForNutra) to learn more.

