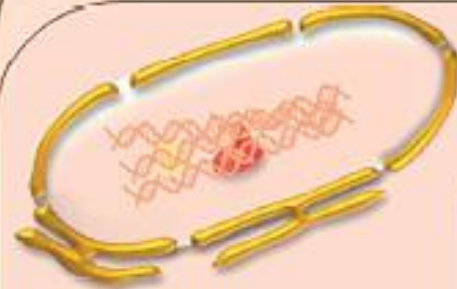


Production of nutraceuticals through Chloroplast engineering



Nucleus

Astaxanthin

Folate

Keto-carotenoids

Lysine

Methionine

Omega-3-fatty acid

Tryptophan

Vitamin A, C, E, K1

New targets through Chloroplast engineering

Auraptene

Baicalien

Bixin and norbixin

C-50 keto-carotenoids

Cannabinoids

Carnosic acid

Fucoxanthin

Myxoxanthophyll

Neoxanthin

NMI fatty acids

Peridin

Squalene

Synechoxanthin

Ubiquinone

Artemisinin

Chloroplast



Astaxanthin

Complete cytosolic
MEV pathway

Provitamin A

Starch

Tryptophan

Vitamin E