

MIXED FRUIT AND VEGETABLE JUICES

INTRODUCTION

Healthy eating is inconceivable without fruits and vegetables. Fruit and vegetable juices are slowly being accepted as their next alternatives and popular for their refreshing taste, ready source of energy with natural vitamins, minerals and trace elements. Tomato, carrot and beetroot juice are the most popular. They also make an excellent base for vegetable cocktails, i.e., mixtures of different vegetable juices. Vegetable juice or pulp can be diluted with drinking water to produce vegetable nectar, which must contain at least 40% vegetables. All vegetable juices contain a concentrated amount of valuable minerals such as calcium, sodium, potassium, magnesium etc. which are preserved as nutrients even after the vegetables are converted into juice. While potassium has a cleansing and diuretic effect on the body calcium and magnesium are important for the nervous system, as well as for the teeth and bones.

An attempt has been made to blend vegetable juices for their goodness with fruit juices for their flavours to produce four different formulations of blended Ready to drink beverages with higher levels of vegetables and fruits juices.

SALIENT FEATURES

1. It is a concentrated fruit product with a good nutritive value,
2. It is in ready-to-drink form
3. The product has a good shelf-life.
4. The product has a ready internal market & promising export potential.

MARKET

World of beverages is in a rapid pace of diversification in the recent years. As a result, there is an impressive range of beverages now being marketed. International cross – fertilization of ideas has played a major role in this and has resulted in various new formulations. Since the trend is more towards health and nutrition in the present day, the blended fruit and vegetable beverages, which contains the goodness of both fruits and vegetables in restoring Fluid and Electrolyte balance has good potential in the market.

RAW MATERIAL

Vegetables, fruits, sugar, enzymes & preservatives

PLANT & MACHINERY

Major equipments required are Fruit washer, Fruit mill, Pulper, Boiler, Syrup storage tank, Hydraulic press, Colloidal mill, Peeler, Jacketed kettles, Refractometer, Sealing machine, Platform & Counter scale etc.

PROJECT COST – FIXED COST – WORKING CAPITAL (in Rs. ‘000) (Estimate for a model project)

a)	Land & Land development (2000 Sq. m)	500.00
b)	Building and civil works (500 Sq. m)	2000.00
c)	Plant and machinery	1800.00
d)	Miscellaneous fixed assets	150.00
e)	Pre-operative expenses	430.00
	Total fixed capital	4880.00
	Working capital margin	670.00
	Total Project cost	5550.00

Means of finance

- Promoters contribution	1387.50
- Term loan	4162.50

PRODUCTION CAPACITY- (estimate)

Suggested economic capacity:	1000 Kg juice/ day
Working	: 1 shift/day, 250 working days/ year
Capacity	: 250 MT /annum

TECHNOLOGY/MANUFACTURING PROCESS – Availability

The technology for the manufacture of mixed fruit and vegetable juices has been developed at CFTRI, Mysore, using appropriate equipment for optimal product recovery of right quality. The CFTRI has the necessary expertise to provide technical assistance and guidance for setting up the project. The CFTRI can offer further technical assistance for project implementation under technical consultancy arrangements.