

APPENDIX - III

PHASE III and IV -HEDONIC SCALE TEST SCORE CARD

Name:-
Product:-

Date:-
Time:-

You are presented with five different soy food items. Please taste these samples and give your opinion by checking (✓) at the point on the scale that best describes your feeling about the samples.

Sr. No.	Points	Soy Usal	Soy Sambhar	Soy Dhokli	Soy Stuffed Paratha	Soy Roti	Carrot Kheer	Spinach with white sauce
1	Like extremely							
2	Like very much							
3	Like moderately							
4	Like slightly							
5	Neither like nor dislike							
6	Dislike slightly							
7	Dislike moderately							
8	Dislike very much							
9	Dislike extremely							

Comments / suggestions:-

Signature

APPENDIX—III - A

PHASE III:

NUTRITIVE VALUE OF SOYBEAN

The Soybeans belongs to the family of Legumes (pulses). Its botanical name is "GLYCINE MAX MERR".

FOOD VALUE OF SOYBEANS:

(Value per 100 gm. of edible portion)

Moisture	: 8.1 gms
Protein	: 43.2 gms (53gm% in defatted flour)
Fats	: 19.5 gms
Fibre	: 3.7 gms
Minerals	: 4.6 gms
Carbohydrates	: 20.9 gms
Energy	: 432Kcal

Minerals and Vitamins

Calcium	: 240 mgs
Phosphorus	: 690 mgs
Iron	: 10.4 mgs
β- carotene	: 426 µg
Vitamin B-complex	: 4.33 mgs
Vitamin E	: small amount

APPENDIX—III - B

PHASE III

ESSENTIAL AMINO ACID CONTENT OF SOYBEAN

Approximately total N (g/100gm) = 6.91

EAA mg/gm N

Arginine	: 450
Histidine	: 150
Lysine	: 400
Tryptophan	: 80
Phenylalanine	: 300
Tyrosine	: 210
Methionine	: 80
Cystine	: 100
Threonine	: 240
Leucine	: 480
Isoleucine	: 320
Valine	: 320

APPENDIX – III - C

PHASE III

PREPARATION OF THE SOY FOOD ITEMS:

1. SOY USAL : (One Serving)

Ingredients	Amount
Soybeans, whole	25gms
Onions, chopped	10gms
Tomatoes, chopped	10gms
Oil	5gms
Garlic and ginger paste	
Garam masala	

Method:

Soybeans were soaked overnight. Then they were pressure cooked with the pinch of turmeric. The cooked beans were slightly mashed.

Oil was heated in a pan and mustard and cumin seeds were added to it. Then chopped onions, garlic and ginger paste were added to it. It was cooked on a low flame till onions turned light brown and then chopped tomatoes were added. Once tomatoes were cooked, cooked soybeans were added and then mixed well. Red chilli powder, garam masala, coriander powder and salt were added.

Little water is added and it was cooked for about ten minutes on a low flame with a lid on it. It was garnished with chopped coriander leaves and served hot with 5gms of sev on top of it.

2. SOY SAMBHAR: (One Serving)

Ingredients	Amount
Soybeans, whole	25gms
Onions, chopped	10gms
Tomatoes, chopped	10gms
Oil	5gms
Garlic and ginger paste	

Garam masala
Sambhar masala

Method:

Soybeans were soaked overnight. Then they were pressure cooked with the pinch of turmeric. The cooked beans were mashed properly.

Oil was heated in a pan and mustard and cumin seeds were added to it. Then chopped onions, garlic and ginger paste were added to it. It was cooked on a low flame till onions turned light brown and then chopped tomatoes were added. Once tomatoes were cooked, cooked soybeans dal were added and then mixed well. Red chilli powder, garam masala, coriander powder, curry leaves, sambhar masala and salt were added.

Little water is added and it was cooked for about ten minutes on a low flame with a lid on it. It was garnished with chopped coriander leaves and served hot with two button idlis on top of it.

3. SOY DHOKLI: (One Serving)

Ingredients	Amount
Soybeans, whole	25gms
Onions, chopped	10gms
Tomatoes, chopped	10gms
Jaggery	5gms
Oil	5gms
Garlic and ginger paste	
Garam masala	

Method:

Soybeans were soaked overnight. Then they were pressure cooked with the pinch of turmeric. The cooked beans were mashed.

Oil was heated in a pan and mustard and cumin seeds were added to it. Then chopped onions, garlic and ginger paste were added to it. It was cooked on a low flame till onions turned light brown and then chopped tomatoes were added. Once

tomatoes were cooked, cooked soybeans mashed dal were added and then mixed well. Red chilli powder, garam masala, coriander powder and salt were added. Little water is added to get the consistency and it was cooked for about ten minutes on a low flame with a lid on it. It was garnished with chopped coriander leaves and served hot with three to four dhoklis on top of it.

4. SOY STUFFED PARATHA: (One Serving)

Ingredients	Amount
Soybeans, whole	25gms
Boiled potato	20gms
Wheat flour	40gms
Sugar	5gms
Oil	5gms
Garlic and ginger paste	
Green and Garam masala	

Method:

Soybeans were soaked overnight. Then they were pressure cooked with the pinch of turmeric. The cooked beans were mashed. Stuffing was made by mixing mashed beans, potato and all the masalas.

Prepare semi soft dough out of atta and make two balls of it. Roll the ball to a size of puri, fill half the stuffing and cover it properly from the sides. Again roll to a paratha, gently put it on hot tava and roast it. Like these make two parathas and serve hot.

5. SOY ROTI :

Defatted soy flour was provided by the investigator to the institution, where it was used by the cook to prepare soy roti with 20% incorporation of defatted soy flour in wheat flour. Soya rotis were provided to the elderly subjects in both the meals for three months.

(One Roti)

Ingredients	Amount
Wheat flour	24gms

Defatted soy flour	6gms
Oil	5gms

Method:

Dough was made after mixing wheat flour, defatted soya flour, oil and water. It was kneaded properly. Large balls were made out of it and were rolled to make medium sized thick soy roti.

6. CARROT KHEER: (One Serving)

Ingredients	Amount
Rice flakes powder	30 gms
Whole milk powder	10 gms
Dehydrated carrot powder	10 gms
Sugar powder	20 gms
Cardamom powder	to taste

Method:

Carrots were washed and cleaned properly. It was cut into slices and blanched. Slices were dried under the shade and powdered. Rice flakes were cleaned and roasted to make the powder. All the ingredients were mixed and stored properly in a clean airtight jar. Before serving of Kheer, 200ml of water was boiled. To it, Kheer powder was added and cooked till it boiled and desired consistency was achieved.

7. SPINACH IN WHITE SAUCE: (One Serving)

Ingredients	Amount
Rice flakes powder	30 gms
Whole milk powder	10 gms
Dehydrated spinach powder	10 gms
Sugar powder	10 gms
Salt and pepper	to taste

Method:

Spinach leaves were cleaned and washed properly. Leaves were blanched and dried under the shade and powdered. Rice flakes were cleaned and roasted to make the powder. All the ingredients were mixed and stored properly in a clean airtight jar. Before serving water was boiled, soup powder was added and cooked till desired consistency was achieved.