

USE OF TENDER COCONUT WATER IN GASTRO-ENTERITIS

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The use of tender coconut water (TCW) as a remedy in gastroenteritis is receiving greater attention by the clinicians in recent days.

Tender coconut is a natural product available in all parts of the country and specially in rural areas, it is a ready and handy boon to combat the dehydration of patients suffering from severe diarrhoea and vomiting, and is a cheap substitute to glucose, saline or plasma.

TCW contains not only glucose but also other nutrient elements such as nitrogen, phosphorus, sulphur, sodium, copper, iron, potassium, calcium, fat, sugars, amino acids and vitamins, which vary in proportion according to the age of the coconut. TCW has a caloric value of 17.4 per 100 gms. of water. A tender coconut of 6 months age contains much glucose.

Table I gives the Chemical Content of T.C.W. and Normal Plasma

Acharya Vagbhta in his *Ashtanga Hridaya* has described it as :

Snigdha : (Containing fats and amino-acids).

Swadu : (sweet because of glucose, fructose and carbohydrate contents).

TABLE I

Determination	Pradera	Elsman	Raja-suriya	D. Silva	C.F. T.R.I.	Normal Plasma
	1942	1954	1954	1959	1961	
Sp. gravity	1.028	—	1.020	1.020	—	1.027
Ph. m Eq/LIT	—	5.6	4.8	4.9	—	7.1
Calcium m Eq/LIT ..	14.5	12.00	—	9.00	0.2%	5.00
Potassium m Eq/LIT ..	38.2	49.00	49.00	53.70	—	4.5
Magnesium	—	17.00	—	19.00	—	1.8
Chloride	21	63.00	—	57.6	—	105.00
Sodium	—	5.00	4.00	4.2	—	140.00
Phosphate	4.4	8.00	—	2.4	0.1%	2.00
Sulphate m Eq/UT. ..	—	5.00	—	—	—	0.7
Proteins G./C. LIT. ..	—	0.180	—	0.156	0.1%	6.00
Glucose G./C. LIT. ..	4.3	2.1	—	1.8	—	0.1
Fructose G./C. LIT. ..	—	3.8	—	3.2	—	—
Insulin mg.%	—	15.2	—	—	—	—
Water mg.%	—	—	—	—	95.5%	—
Carbohydrates	—	—	—	—	4%	—

Source: Antiseptic, April, 1963

Vrlshya : aphrodisiac

himam : cool.

laghu : its sp. gravity is less than that of plasma and it is easily digestible.

It alleviates thirst, *pittha* and *vata*.

It is *deepana* (digestive) and purifies the *vasthi* (bladder).

Mode of Action : TCW tones up the heart muscles, increases the heart rate, and helps in maintaining body warmth in cases of dehydration. It increases the blood circulation in the kidneys and causes profuse diuresis. It is also a urinary antiseptic and eliminates poisons through the kidneys in cases of mineral poisoning.

Some case reports (in brief) given here show its efficacy in dehydration and the absence of any untoward reactions.

Case Reports :

1. 26.4.66—A.R., aged 19 days only, in dehydrated condition successfully treated with 100cc. TCW subcutaneously.
2. 11.5.66—M, age 9 months, treated as above.
3. 16.5.66—H., 30 years, Patient of enteric fever in 2nd week, given 50 cc. of TCW I. V.; no allergic reactions.
4. 21.5.66—R., 20 year; dehydration 200 cc. TCW given I. V. with good results.
5. 18.6.66—H., 45 years; dehydration with failing pulse, 400 cc. TCW given, 50 cc. I.V., and 350 cc. via S.C. route, the patient regained warmth after the whole fluid was administered, pulse also became normal and he recovered gradually.
6. 24.6.66—A, 10 years, toxic diarrhoea and vomiting due to ingestion of parvata of kasalli fruit and subsequent dehydration, treated with 100 cc. of TCW S.C. with success.
7. 27.6.66—V., 9 months; dehydration due to gastroenteritis, 100 cc. of TCW given S.C. with success.
8. 27.6.66—R., 9 years; treated with oral administration of TCW 200 cc. daily for 5 days. There was gradual and marked improvement in his appetite, heart rate strengthened and he became active.
9. 8.7.66—S., 30 years; gastroenteritis with high fever, treated with 50 cc. of TCW I.V., and 400 cc. was administered orally.
10. A teacher aged about 52 years with slight hypertension having loss of appetite, giddiness & general uneasy feeling. He was advised to take water from one tender coconut every day or once in two days, for a month. He was then asked to discontinue it for a week. The symptoms which had disappeared during the period of taking TCW reappeared after stopping the TCW. He was advised to continue taking TCW and the symptoms gradually disappeared.

Generally, TCW claims the second place when plasma and its derivatives are not available in emergency. But it is to be noted that the substitution with it is more economical and advantageous to the patient. This simple natural medicine may be given in case of dehydration, taking of course the strictest aseptic measures in making the pinpoint hole at the usual end of the coconut.