

APEF: PERIODIC SURVEY

Observation of results

Sent by: *Sister Gladis Riveira, administrator*
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Date: February 2006

Name of Centres:	Centre for Child Nutritional Recovery
Address:	Villa de Mayo, Avenida Cumavi, Santa Cruz, Bolivia
Person in charge:	Dr Edgar Valdez, nutritionist, director of the Centre for Nutrition, Santa Cruz

1) TO WHOM DO YOU GIVE LUCERNE LEAF CONCENTRATE (LLC)?

- ✓ Children - Number: 85 (44 in-patients, 51 outpatients)
- Age: from 6 months to 3 years

2) HOW DO YOU USE LLC?

- ✓ Eaten as received (semolina) or after milling/grinding (flour)
 - Flour (after milling/grinding)
- ✓ Size of portion per recipient
 - 3 g at breakfast and 3 g at lunch
- ✓ How is the LLC given? (e.g. mixed with ...)
 - Mixed into cereal, fruit or vegetable purées
- ✓ Do you increase the quantities from the start of the programme? How?
 - We have not built up the quantities, but started with 3 g (misunderstanding of the directions given at the start by Cecilia)

3) IN WHAT CIRCUMSTANCES DO YOU GIVE LLC?

- ✓ Malnutrition:
 - Light (1st degree)
 - Moderate (2nd degree)
 - Severe (3rd degree)
 - Kwashiokor
 - Marasmus
 - Mixture
- ✓ Illnesses:
 - Anaemia
 - Diarrhoea
- ✓ Other reasons: Leukaemia (one child, 7 years old, after chemotherapy)

4) WHAT ARE THE OBSERVED POSITIVE EFFECTS?

- ✓ Children (age):
 - Increase in weight and height
 - Improvement in muscle tone in children < 1 year old
 - Recovery of muscle tone in walking-age children
 - More rapid development of mental-physical co-ordination, improved alertness
 - Reversal of anaemia (haemoglobin measured at start, but not at end. All haemoglobin levels are low in all children)

Previously, 50% of children required blood transfusions in hospital; since the start of the LLC programme, no transfusions have been required

5) HOW LONG BEFORE POSITIVE RESULTS ARE OBSERVED?

Start of improvement: After two weeks
Attainment of satisfactory result: 30 to 45 days

6) HAVE YOU WITNESSED ANY NEGATIVE EFFECTS?

- No
 Yes, in the following cases:

7) YOUR PERSONAL OPINION (on LLC and its use)

Opinion of the parents:

- Parents of in-patient children: they have observed a great difference in their children – more alert, improved muscle tone, rapid increase in weight
- Parents of out-patient children: happy to continue giving LLC, are convinced of the “miracle” of leaf concentrate, have learnt to make it

8) OPINION OF MEDICAL PROFESSIONALS?

All personnel are convinced of the effectiveness of leaf concentrate and have observed clear improvements in the recovery process of children arriving at the centre.

The Centre’s nutritionist holds workshops for the mothers who are always present at the Centre with their children, to teach them how to make leaf concentrate so they can continue giving it at home.

The nutritionist thinks that leaf concentrate is an excellent dietary supplement, very nutritive, and further approves of it because it is a natural product.

The cook and the nurses teach mothers in their areas how make leaf concentrate.

All the members of the team have tried leaf concentrate. Some nurses, to see whether it causes diarrhoea in children, have noticed a softening of their stools, but are convinced that LLC is not the cause of diarrhoea.

Nonetheless, at the moment, the policy from the Director is to stop giving LC in cases of diarrhoea.

The administrator of the Centre, Sister Gladis Riveira, says that (the use of) leaf concentrate is revolutionary in the treatment of child malnutrition.

She has observed a very clear change since the start of LC: shorter recovery times (between 40 to 45 days, compared with 70 to 90 days previously), gains in weight and height, greater alertness; she testifies to the joy of the parents.

It is also her opportunity to take note of the things lacking that are required to improve conditions of care, such as [measuring] haemoglobin levels, and other deficiencies, which should be compulsory before the children leave the Centre, so as to separate the leaf concentrate group from the iron-sulphate group (all children receive iron supplements, so it is not possible to isolate the anti-anaemic effect of leaf concentrate alone, although we suspect that there is one). We await Dr Valdez’s improvements.

9) YOUR PROJECTS AND FUTURE NEEDS

- To be able continue to benefit from the leaf concentrate that is sourced from France, whilst training mothers to make it themselves
- To spread information and knowledge to other centres and organisations who are fighting against malnutrition in the countryside and in towns

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Sister Gladis Riveira: administrator
Dr Nelida Uyeno Toledo: locum paediatrician
Aida Oliva: nurse supervisor
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Gaby Melgar: teaching assistant
Elsy Saucedo: teacher
Karina Serrudo Candia: nutritionist