The Holistic Process

The holistic process is a way of learning in which people from different trends of life come together in order to solve a problem. This method of learning is a combination of traditional ecological knowledge, place-based knowledge and formal education. It is based on an ethnorelative attitude where it is crucial to listen, understand, and accept different cultural boundaries and yet work around them without encroaching on one’s beliefs and still finding the desired results.

The first step in forming a holistic relationship is to listen and learn from each other in order to build a rapport full of trust and understanding. Next, key values and goals must be recognized (Savory and Butterfield 1999). Once this fundamental core is established the resource base and tools can be developed along with the way these tools can be implemented in order to produce results. Finally, future resources along with a maintenance and management plan must be developed in order to have long term, lasting results.

Hypothesis Tested:
The amounts of lysine and tryptophan in a standard Sanambelean diet meet the minimal requirements that are needed by a 2 year old child.

Methods
- Interviews with Florence Dunkel (2011) and Malian mentors (Coulibaly 2011, Tamboura 2011)
- Peer Reviewed Journal Articles
- The FAO
- Past PSPP 465R student papers (Fejes 2009, Taylor 2010)
- Spreadsheets combining all the information into an organized format.
- Experiments to determine cereal to water ratio in making tou

Discussion/Results
The results of my research shows that the main and most common food items in a Sanambele diet include lysine and tryptophan even if only in small amounts.

Three cereals that are available all year and are the main ingredients in tou were examined further and measured after having been cooked. This was done in order to better assess the lysine and tryptophan amounts after some of the nutritional value may have been lost in the cooking process.

Maize, millet, and sorghum each lacked in either lysine or tryptophan or both and did not meet the estimated average daily requirements.

Conclusion
We rejected our hypothesis. In a minimum cereal diet (using only one: maize, millet, sorghum) a two year old child would not be receiving the estimated recommended amount of lysine and/or tryptophan which are both necessary in avoiding kwashiorkor (Williams 1935). However there are other foods such as peanuts, Bambara ground nuts, grasshoppers, milk, mangoes, okra, and cashews that can be added into the child’s diet on a seasonal basis in order to help fill the void and to bring the children closer to the required amounts of lysine and tryptophan.

Recommendations
- Implement high protein snacks such as peanuts and grasshoppers on a daily basis into the children's diet.
- When possible, allow the children to eat more animal protein.
- Add milk in the diet to provide necessary amino acids as well as other important nutrients.
- Examine ways to better store seasonal items that are high in amino acids so they can be utilized throughout the year.

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Seasonal Availability of Sanambele Foods

Seasonal Availability of Lysine and Tryptophan in a Sanambelean Diet

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