in a two-dimensional plane. Any other set of weights, in this analogy, are like fitting any other arbitrary subjective straight line. More understanding as to why one should use different weights (rather than equal weight) can be had by reading conceptual interpretation of the first principal component in any book of multivariate analyses.

High correlations with different sets of weights, as shown, simply indicate that the nutritional scores of children tend to increase or decrease together. It may also suggest that if the purpose is to rank the children by their nutritional score, an average of all the measurement could be used as an index. One should be cautious about interpreting the magnitude of such an index.

In general, I would suggest that one should attempt to use the principal component analysis technique to derive weights for this problem and any other similar problem.

Prem P. Talwar, PhD
International Fertility Research Program
NCNB Plaza
Chapel Hill, NC 27514

The Birth Numbering Concept

Lunde's article on birth numbers (AJPH, November 1975) extols the glory of the concept. He argues for a system that allows easy access to multiple types of records—medical, criminal, occupational, educational, etc.—and easy linkage of these records.

I thought 1984 was 9 years away. Lunde seems to want it now! What way is there to insure confidentiality? How do we get rid of governmental and private data banks that have already amassed tons of information about every individual living in the United States? How may I protect my right to the privacy of my own self? What is there in the system that will protect me from the political use of my medical history, my sexual experiences, or the charities I contribute to? I shudder at the thought of Lunde's system actually being adopted in this country (I already fear the CIA and FBI). In other words, I would rather see less systematic data collection for health research so that my civil liberties are reaffirmed in these years of the Bicentennial.

Kenneth Solomon, MD
Instructor
The Albany Medical College of Union University
Albany, NY 12208

Indices for Evaluating Nutritional State

Dr. Talwar[1] is correct in perceiving the need for composite anthropometric indices for the evaluation of nutritional state. What is not clear is whether there is any real benefit in using an index with different weights for each variable, as suggested by him, as opposed to using a simpler index based on equal weights.[2,3] There are several reasons for my skepticism about the practical advantage of an index with different weights: in most cases their exact values will differ from sample to sample; they will be of very similar magnitude;[4-6] and in any case the high correlations between the measurements makes the choice of weights of little importance.[5]

To illustrate this last point data on weight (V1), height (V2), and arm circumference (V3), each expressed as a percentage of normal, were taken from 250 children, age 6 months to 5 years 9 months from our ongoing studies in a very poor area of rural Southern Tunisia [7] and four indices calculated as follows:

$I1 = (V1 + V2 + V3)/3$
$I2 = \frac{1}{4}V1 + \frac{1}{2}V2 + \frac{1}{4}V3$
$I3 = \frac{1}{2}V1 + \frac{1}{4}V2 + \frac{1}{4}V3$
$I4 = \frac{1}{4}V1 + \frac{1}{4}V2 + \frac{1}{2}V3$

The correlations between the four indices were calculated and are given in Table 1. It will be noted that the smallest correlation (between I3 and I4) is 0.968, showing that the indices are to all intents and purposes identical. That being the case, the simplest way to obtain an index is simply to take the average of all the measurements, each expressed as a percentage of some appropriate standard.

TABLE 1—Correlations between four indices

	I1	I2	I3	I4
I1	1.000	0.998	0.992	0.991
I2		1.000	0.992	0.982
I3			1.000	0.968
I4				1.000

Mohamed el Lozy, MD
Department of Nutrition
School of Public Health
Harvard University

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