MEASUREMENTS OF SOME PRODUCTS SOLD IN THE PERIPHERAL MARKETS OF BANDUNDU CITY BY MALE AND FEMALE GARDENERS IN FEBRUARY 2023

ABSTRACT : In this article, we present, after a survey carried out on the ground, in the City of Bandundu, estimated measurements of the quantities (weight, number and nutritional value) of some products sold by the market gardeners of this city and that the Bandundians consume regularly . **We bought some products sold by the market gardeners of this city which we counted, weighed and evaluated the nutritional value in order to say at the end if the inhabitants of this city know how to evaluate what they consume.**

Key words : Measurement, measurement, plant product, plant, peripheral.

1. INTRODUCTION : In most African Provinces, residents ignore the usual estimated measurements (values of daily expenditures, weekly expenditures, monthly and even annual expenditures. This is not enough. This is also the case of ignorance of the nutritional value of the household basket, measurement values of products purchased at markets, the number and weight of products consumed, etc.).
We are deeply marked by this attitude of not wanting to know the measurements of quantities of products that we regularly consume in particular and also of all the usual measurements in general.

estimated measurements of three quantities: number, weight and nutritional values of products sold in the peripheral markets of the city of Bandundu and consumed by the Bandundians that we are .

To many readers, the topic covered in this article seems really banal. The question we ask ourselves here is whether the inhabitants of the Bandundu City ring road know the quantity measurements (weight, number and nutritional value) of the

products sold by market gardeners in the peripheral markets of the town of Bandundu?

matembele leaves. , embers (makala), sweet amaranth (ndunda), bitter amaranth (bilolo), sugar cane (koko), tomato, peanut (nguba), onion, sorrel, sweet potatoes, eggplant, palm oil, caterpillars, soy, rice , cowpea, wheat flour, corn flour, orange, mushroom, mikungu , … which are produced by themselves. Alongside these self-sown products, there are others such as sugar, milk, smoked fish, etc. which also flood these peripheral markets.

We say that knowledge of these measures would be important in order to rationalize purchases and consumption; and also to know the quantities and values of what residents buy and consume; and this would save them from unnecessary expenses in order to allow them to consume useful and balanced, that is to say this study allows us to properly appreciate the number, weight and nutritional value of what we consume.

It is worth remembering that the measurements are very important indications for evaluating the company. The Philosopher PROTAGORAS has supported since the 5th century that “man is the measure of all things”. Indeed, the size of a door, the length of a bed, the height of a chair, the quantity of a meal, the size of a stadium, the surface area of a classroom, etc. are a function of man. Which leads us to say that the size of the housewife's basket also depends on the size of the household. . The sociologist Abraham KAPLAN says that the question of measurement in the social sciences and more precisely in sociology, has already been the subject of numerous discussions and debates over the years. These debates concern the place of the figure or number and its role in the development of knowledge of the social.[7]

The objective of this study is to estimate the quantities (weight, number and nutritional values) of some products sold by market gardeners, most of whom are women, in some peripheral markets of the city of Bandundu.

The methodology used consists of going out into the field and purchasing the products under examination, bringing them back to the dietary kitchen of the Higher Institute of Medical Techniques of Bandundu (ISTM BDD); groupers, count them, weigh them and determine their nutritional values. Five (5) teams of five students each supervised by ourselves were formed for this purpose. No questions referring to our investigation were asked of the market gardeners.

The materials used are the three scales (Mastrand scale , kitchen scale and precision scale), bamboo glass and ekolo . It is a question of direct and indirect observations. We remind you that this study is not exhaustive.

We manually used proportion calculations to determine the nutritional values from Table No. 1.

The various purchases take place at the Binkumu markets in the Malebo district , Mayoyo commune , Bitula market in the Border district of the Disasi commune, Libongo market ya zelo from the commune of BASOKO, Pont Trois Rivières market and also at the Office market; all in the town of Bandundu from January 1 to January 25, 2023.

The originality of this article lies in the fact that this work provides the estimated measurements (quantity, weight and nutritional values) per unit sold to the peripheral markets of the city of Bandundu by market gardeners. It also means creating a spirit of rationalization of the quantities consumed in the stronghold of the inhabitants of Bandundu in particular and those of all the inhabitants of the DRC in general. **We say that this article ranks among original research articles because it immerses us in a study conducted for the first time in this environment.**

The structure of this article revolves around the following points:

First, the introduction which will be followed by the notion of measurement and measurement, presentation of the table of nutritional values of the Democratic Republic of Congo, presentation of data, analysis of data, interpretation and discussion. A conclusion ends this article.

2. CONCEPT ON MEASUREMENTS AND MEASUREMENT

There is not much written in general in this area.

Denis BOUYSSOU and everything [1]said that measuring is an assignment of numbers to objects according to precise rules.

SS STEVENS [2]adds that the result of the measurement and what can be done with it depend on the type of measurement carried out. Measurement allows for an objective representation , a convenient representation of the facts that allows action. **Abraham Kaplan conceives of measurement, not as an end in itself, but as a means of increasing and consolidating knowledge of objects.**[7]

Thus, in ordinal measurement, objects have aroused qualities. We use the tools to tell if an object has more or less of a quality than another. Measuring instruments are used.

Measurement is the operation of measuring

3. FOOD COMPOSITION TABLE IN THE DEMOCRATIC REPUBLIC OF CONGO

Table No. 1: FOOD COMPOSITION TABLES IN THE DEMOCRATIC REPUBLIC OF CONGO
Source: ONYEMBE PMLA and MBEMBA NT[3]

FOOD 100g	calories	WATER fr g	NUTRIENTS fr g				MINERAL SALTS in mg					VITAMINS in mg		
			PROT	LIP	HC	FIBERS	N / A	K	Californi a	P.	Fe	Vitamin A	Vitamin B1	Vitamin C
I. CEREALS														
CORN GRAINS	359	12	9.5	4.4	72.4	2.2	1	340	20	240	4.9	0.05	043	4
BROWN RICE GRAINS	352	12.9	9.1	1.1	76.6	0.9	ten	275	50	300	2.0	0	0.42	0
POLICRU GRAINS (White)	358	12	7	0.5	78.9	0.6	2	120	ten	88	0.9	0	0.07	0
SORGHUM GRAINS	353	13.7	10.7	3.2	74	2.4	-	-	26	330	0.6	0.012	0.36	0
CORN FLOUR	349	12	9.5	3.5	72.1	1.6	-	300	16	220	7	44	0.4	0
WHITE BREAD	265	36	8	1.8	52.7	0.4	500	100	22	95	1.8	0	0.12	0
II. ROOTS-TUBERS														
PLANTAIN	121	65	1.3	0.4	28	0.4	-	22	11	31	0.6	0.05	0.06	15
YAM (WHITE)	101	70	2.1	0.1	23	0.8	30	225	24	2758	0.2	0	0.09	5
CASSAVA ROOT	168	58.2	0.9	0.2	83.4	1.4	-	-	25	3021	1.2	0.03	0.04	27
COOKED CHICOUANGUE	172	58	1.2	0.8	40	1.4	-	-	-	-	-	-	-	2
CASSAVA FLOUR	340	13	1.5	0.3	83.4	1.4	-	-	46	95	5.2	0	0.07	7
CASSAVA+CORN	351	-	5	1.7	79	-	-	-	-	-	-	-	-	-
POTATOES	94	75.4	1.7	0.1	22	1	ten	600	ten	6055	0.9	0	0.08	1514
III. LEGUMES														
FRESH PEANUT	350	43	13	26	15	3	-	-	30	90	1.8	-	-	-
GRILLED PEANUT	601	3	27	49	13	2.5	5	700	60	360	2.0	0	0.30	-
PEANUT BUTTER	610	3	27	50	13	1.6	0	0	72	396	1.8	0	0.13	0
REGULAR BEAN	607	1.7	28	47	18	2	4	757	36	396	2.0	0	0.12	2

NIEBE	330	12	19	1.5	51.1	4	2	1000	88	341	6.7	0.06	0.42	1
DRY SOYBEAN SEEDS	350	11	23	1.4	61	4.8	0	0	101	383	7.6	0.01	0.75	2
FERMENTED SOY BEANS	422	9.9	35	17.9	50.6	5	4	1830	280	500	6.3	0.028	0.84	-
UNDISHED SOY FLOUR	153	45	17	8	-	-	-	-	100	-	3.7	-	0.09	-
SOY MILK	436	9	38	20	26	2.3	-	1670	208	553	-	-	0.7	-
DRIED SESAME SEEDS	35	91	3.4	1.5	2.1	-	-	-	21	47	0.7	-	0.09	13
	611	5	18	51	20	4.5	-	-	816	600	8.1		0.68	-
FOOD 100g	**calories**	**WATER fr g**	**NUTRIENTS fr g**				**MINERAL SALTS in mg**					**VITAMINS in mg**		
			PROT	**LIP**	**HC**	**FIBERS**	**N / A**	**K**	**Calif ornia**	**P.**	**Fe**	**Vitamin A**	**Vitamin B1**	**Vitamin C**
SWEET POTATO LEAVES	53	81.8	4.4	0.6	11.3	2.2	-	-	258	59	4.2	71.6	0.1	70
PARSLEY	26	87	4.0	0.7	1.0	2.0	25	700	40	30	10.8	0.53	0.06	125
VETERINARY PEPPER	61	80	2.9	1.5	ten	-	6	139	34	26	0.4	0.03	0.04	100
RED PEPPERS	92	72	2.5	2.5	15	-	-	-	35	-	07	0.1	0.8	100
LEEK	31	90	2.0	0.3	5.0	1.5	5	250	68	30	1.0	0.07	0.12	25
GREEN PEPPER, SWEET PEPPER	22	92	1.2	0.2	3.8	1.4	0.5	186	11	25	0.4	-	0.07	120
RED PEAR	48	87.4	1.1	0.1	10.7	1.4	-	-	5	18	1.2	0.165	0.04	40
TARO LEAVES (Langa)	38	98	2.4	0.6	5.7	1.5	-	-	98	49	2.0	0.1	0.17	25
TOMATOES (RIPE)	18	91.7	1	0.3	3	0.7	ten	300	ten	26	1.1	0.3	0.05	25
TOMATO PUREE	68	77	3.0	0.1	14.0	0.2	450	1050	35	65	4.5	1.07	0.12	32
LEAVED TOMATO/ Bilolo	63	82	4.8	0.3	10.3	2.4	-	-	523	94	6.0	0.06	0.23	67
BITTER TOMATO FRUITS	36	91	1.5	0.1	7.2	2.0	-	-	28	47	1.5	-	0.07	8
RED BELL PEPPER	-	-	-	-	-	-	46	2416	-	-	-	-	-	-
MORANGA OLIFEIRA	-	73.9	8.4	3	3	2.4	-	-	210.3	178.2	178.5	74	-	-
VI. FRUITS														
PINEAPPLE	50	84	0.5	0.2	0.2	0.5	2	220	12	0.4	8	0.045	0.07	34
LAWYER	207	70	1.7	20	5.9	1.6	3	680	16	0.7	40	0.03	0.10	20
BLACK LAWYER	152	78.2	1.6	16.2	3.1	1.9	-	-	12	0.8	38	0.165	0.05	14
GREEN AVOCADO	159	74.2	1.8	14.8	8.0	1.9	-	-	8	1.4	46	0.072	0.06	15
NANENES (RIPE)	92	75	1	0.1	22	0.5	2	400	ten	1.4	30	0.03	0.1	ten
BAOBAB	173	20	2	0.5	40	6.8	-	-	220	7.4	190	0.01	0.55	130
SUGAR CANE (STEM)	61	82.6	0.6	0.1	16.5	3.1	-	-	8	1.4	5	-	0.02	3
SUGAR CANE JUICE	52	86	0.4	-	12.7	-	-	-	15	0.9	22	-	-	-

LEMON	74	91	0.5	-	3	1	5	150	ten	0.1	25	-	0.05	40
BEEF HEART (Mondenge)	92	74	1	-	22	6.6	-	-	26	0.5	32	tr	0.1	30
GUAVA	56	86	1	-	13	6	-	320	15	1.4	25	0.01	0.05	200
JACQUER	70	77	1.4	-	15	1.3	-	-	8	02	-	0.05	0.05	3
KHAKI, PLAQUEMINE	62	80	0.5	-	15	1.3	-	200	22	0.2	22	0.15	0.05	ten
LIME LINOT	30	86	0.6	-	9	0.7	20	400	40	0.2	40	-	0.04	30
MANDARINS	48	86	0.8	0.3	11.8	0.6	5	250	40	1.2	21	0.07	0.06	28
MANGOSTAN, FAKE COLA	62	-	0.4	-	15	1	-	133	29	-	3	-	-	7
MANGO	62	80	0.4	-	15	1	-	175	17	1.8	17	0.15	0.06	ten
GREEN MANGO	56	84.2	0.5	0.1	14.9	0.7	-	-	17	1.4	8	0.51	0.02	86
RIPE MANGO	65	81.8	0.6	0.1	17.2	0.7	-	-	17	2.1	9	0.83	0.03	42
AFRAMOMUM (Tondolo)	44	89	0.9	0.5	9	-	-	-	15	1.0	-	-	-	2
FOOD 100g	**calories**	**WATER fr g**	**NUTRIENTS fr g**				**MINERAL SALTS in mg**					**VITAMINS in mg**		
			PROT	**LIP**	**HC**	**FIBERS**	**N / A**	**K**	**California**	**P.**	**Fe**	**Vitamin A**	**Vitamin B1**	**Vitamin C**
IV. NUTS AND SEEDS														
COLA NUTS CHAIR	147	53	2.2	0.6	33.7	1.4	-	-	58	86	2.0	0.019	0.03	54
COCONUT CHAIR	388	38	4	40	3	3.5	25	400	19	85	2.3	traces	0.03	2
DRIED COCONUT	628	5	6	60	16	3.5	35	651	40	150	3.6	-	-	-
COCONUT MILK	25	93	0.4	0.4	5	-	105	250	24	30	0.1	-	0.04	1
OIL PALM (Almond)	624	11	6.6	55.3	25	3.0	-	-	78	-	-	-	-	-
HULLE PALM TREE PULP	260	69	0.4	27.6	2.6	0.4	-	-	50	110	2.4	-	0.05	3
TROPICAL ALMONDS (Madame)	640	6	19	56	15	1.3	-	-	394	864	-	-	-	-
V. LEGUMES														
AMARANTH LEAVES	53	84	4.6	0.2	8.3	1.8	-	-	410	103	8.9	0.95	0.05	64
PEANUT LEAVES	83	78	4.4	0.6	14.9	4.6	-	-	262	82	4.2	1.30	1.30	98
AUBERGINE CHAIR	14	93	0.5	-	3	1.0	ten	200	ten	12	0.4	traces	traces	ten
BAOBAB STRAWBERRY LEAVES	74	77	4	0.2	14	2.7	-	-	260	65	-	-	-	45
BAOBAB DRY LEAVES	330	12	12.3	0.3	63.2	9.7	-	-	2241	275	24.0	1.6	1.6	tr
BELÉ BELÉ LEAVES	97	74	8.2	0.6	14.7	2.1	-	-	571	149	11.4	-	-	182
CARROT	40	85.5	0.9	0.2	12.5	1	75	300	30	30	0.8	5.4	5.4	6
CELERY LEAF+FIG	13	90	1	0.1	2	1.5	75	700	80	40	0.1	0.01	0.01	60
MUSHROOMS	23	90	4	0.3	1	1.5	5	400	25	130	1	-	-	5

COMMUNITY OF CABBAGE	54	90	3	0.7	1	1.5	ten	300	30	120	1	0.15	0.15	80
CUCUMBER	6	97	0.5	-	1	0.5	5	200	20	30	0.5	-	-	ten
SPINACH	25	92	2.3	0.3	3.2	0.6	100	500	81	55	4.0	0.80	0.80	40
GINGER ROOT	60	85	1.8	1.5	9.8	1.0	-	-	-	-	-	0.3	0.3	-
OKRA FRUITS	41	87	1.8	0.3	8	3.0	-	-	66	55	1.1	0.03	0.03	20
LEAF OKBO (Dongo-gongo)	23	92	2.8	0.3	2.3	1.9	-	-	258	69	0.2	0.05	0.05	-
LEGA-LENGA	-	-	1	-	3	-	20	280	20	40	1.0	0.18	0.18	27
COMMUNITY OF SORREL	14	92	2	0.2	1	1.0	20	250	50	30	0.5	-	-	25
GUINEA SOCKET (Nai-Ngai)	53	86	3.3	0.3	9.2	1.6	-	-	213	93	4.8	0.69	0.69	54
BEANS (Phaseolus sp)	313	17.3	26	1.9	51.1	5.6	-	-	88	341	9.6	0.006	0.006	6
GREEN BEANS (pods)	39	89	2.4	0.2	7.0	1.4	2	260	65	44	0.9	0.05	0.05	19
LETTUCE	18	94	1.2	0.2	2.9	0.5	15	300	62	38	0.6	0.15	0.15	-
MAKOBO LEAVES	29	92	2.2	0.4	4.8	-	-	-	95	288	2.0	0.55	0.55	37
CASSAVA LEAVES	102	70.8	7.3	1.5	24.5	2.4	-	-	274	105	7.6	0.01	0.01	200
NIEBE, LOUBIE LEAVES	55	85	4.7	0?3	8.3	2.0	-	-	256	53	5.7	1.33	1.33	56
N'KONKO YOUNG GROWTHS	50	87	1.9	0.7	9.0	-	-	-	-	-	-	-	-	-
ONIONS	47	86	1.0	0.3	10.0	1.6	ten	200	30	40	0.5	-	-	ten
KIKALAKASA (African square pea)	61	82.7	7.0	1.3-	5.4	2.2	-	-	565	65.2	55.1	-	-	-

FOOD 100g	**calories**	**WATER fr g**	**NUTRIENTS fr g**				**MINERAL SALTS in mg**					**VITAMINS in mg**		
			PROT	**LIP**	**HC**	**FIBERS**	**N / A**	**K**	**California**	**P.**	**Fe**	**Vitamin A**	**Vitamin B1**	**Vitamin C**
LANDOLIPHY (MATONGE)	61	84	0.7	0.1	14.3	0.3	-	-	15	44	2.0	tr	0.04	12
SAFOU	263	56	4.6	23.6	15.1	8.2	-	-	43	60	0.8	-	-	19
BARN	42	86	0.6	0.4	ten	0.6	2	150	28	20	0.3	0.03	0.06	50
GRAPEFRUIT	30	91	0.5	0.1	9.6	0.6	2	150	20	16	0.3	0.012	0.05	40
PAPAYA	42	85	0.6	0.1	8.4	1	-	-	26	20	0.5	0.15	0.04	50
APPLE	40	87	-	-	ten	1.0	2	150	ten	ten	0.2	-	0.02	ten
VII. PISCES														
FRESH FISH	92	76.7	18.7	1.4	0	0	-	-	24	187	1.7	0.005	0.05	0
LEAN DRIED AND DIRTY FISH	289	13.4	61.8	2.8	0	0	-	-	613	844	3.6	0	0.07	0
DRIED FISH FOR SALE SEMI-FAT	247	14.4	46.0	5.7	0	0	-	-	574	817	4.7	0	0.06	0
DRY AND DIRTY FAT FISH	257	18.6	41.5	8.8	0	0	-	-	653	921	5.6	0	0.08	0
LEAN FISH	76	79	18	0.5	-	-	100	300	20	200	1.0	0.01	0.05	-
FAT FISH	108	70	17	4.5	-	-	100	300	20	200	1.0	0.04	0.05	-

DRY FISH SALE	208	65	16	16	-	-	100	300	20	200	1.0	0.09	0.05	-
FISH MEAL (Medium)	255	14	50	7	-	-	8100	160	1020	750	5.0	-	-	-
CONGOLESE PIKE	320	7	64	7	-	0.6	-	600	4000	2670	-	-	0.04	-
CAPTAIN CRU	78	80	18	0.5	-	-	70	300	20	210	0.6	-	0.15	-
CANNED SARDINES	101	75	22	1.5	-	-	-	-	89	137	4.1	-	-	-
RAW TILAPIA	240	50	24	16	-	-	700	400	20	200	3.0	0.09	0.05	-
DRY TILAPIA	198	77	20	2	-	-	-	-	112	344	3.2	-	0.03	-
FROG LEGS	315	24	54	11	-	-	-	-	2406	1766	10.4	-	0.08	-
SHRIMP	69	81	16.5	0.3	-	-	-	-	18	147	1.1	-	-	-
KWANGO MOLD	90	78	18	2	-	-	1000	250	200	300	2.0	0.02	0.07	2
	70	70	11	2	2	-	300	300	100	250	6.0	0.05	0.15	2
VII. MEAT-INSECTS														
DRIED AND SALTED ANTELOPE	150	60.2	30.4	2.2	-	-	-							
BEEF: FRESH MEAT	122	73.8	22.4	2.9	0	0	-	-	65	302	2.1	-	0.07	0
BEEF: SALTED MEAT	119	50.6	27.1	0.4	0	0	-	-	13	132	5.6	0	0.06	0
BEEF: DRY AND DIRTY	250	29.5	55.4	1.5	0	0	-	-	91	270	5.4	0	0.02	0
LEAN BEEF	115	74	22	3	-	-	100	-	49	910	4.9	0	0.02	0
SEM-FAT BEEF	197	66	20	13	-	-	100	350	ten	200	3	-	0.12	-
FAT BEEF	279	58	18	23	-	-	100	350	ten	200	3	-	0.12	-
								350	ten	200	3	-	0.10	-

FOOD 100g	**calories**	**WATER fr g**	**NUTRIENTS fr g**				**MINERAL SALTS in mg**					**VITAMINS in mg**		
			PROT	**LIP**	**HC**	**FIBERS**	**N / A**	**K**	**California**	**P.**	**Fe**	**Vitamin A**	**Vitamin B1**	**Vitamin C**
HEART OFFAL	126	76	17	6	1	-	100	350	ten	240	4.5	-	0.5	6
LIVER OFFAL	133	71	20	5	2	-	100	300	ten	220	ten	6	0.5	25
OFFAL TONGUE	157	71	19	9		-	100	250	ten	200	3	-	0.12	-
KIDNEY OFFAL	122	75	17	6	-	-	250	300	ten	300	15	0.22	0.17	14
OFFAL TRIPS	94	79	19	2	-	-	45	20	ten	130	1.5	-	0.01	-
DUCK	341	50	20	29	-	-	200	300	ten	200	2	-	0.3	-
CORNED BEEF	289	53	16	25	-	-	1250	100	ten	170	4	-	0.01	-
BLACK PUDDING	484	30	28	41	-	-	-	-	ten	160	4	-	0.13	-
CUT OF HAM	240	61	15	20	-	-	1100	300	ten	300	4	-	0.13	-
LARD	781	7	4	85	-	-	1500	200	2	40	-	-	0.1	-
LIVER PATE	325	53	14	29	2	-	800	75	20	150	5	1.20	0.20	-
SALAMI	387	42	18	35	-	-	1500	300	ten	200	3	-	0.15	-

CHICKEN	170	69	20	ten	-	-	100	300	ten	200	2	-	0.1	-
SMALL SNAKE	90	75	14.4	3.3	0.8	-	-	-	-	-	-	-	-	-
SMOKED CATERPILLARS	333	20.4	62.3	4.6	6.5	2.2	-	-	513	417	-	0	0.10	-0
CATERPILLARS, PALM WORMS	84	81	10.6	2.7	4.2	2.8	-	-	19	139	0.5	-	0.5	-
DRY CATERPILLARS	419	9	53	15.4	17	5.4	-	-	185	617	0.23	2.20	0.17	-
RAW LOCUSTS	163	63	26.8	3.8	5.5	2.4	-	-	40	-	11	-	-	-
TERMITE FLOODS	350	44	20.4	28	4.2	2.7	-	-	-	-	-	-	-	-
TERMITE FUMES	570	8	36.5	44.4	6	3.4	-	-	91	65	21	-	0.1	-
DRY WORMS	430	6	56.8	16.4	13.8	9.6	-	-	458	576	72	-	0.50	-
												0.50		
IX. EGGS														
WHOLE CHICKEN EGGS	15	75	13	11	-	-	150	150	60	220	2			
EGG YOLK	16	50	16	33	-	-	50	150	140	600	6	0.18	0.18	-
EGG WHITE	44	88	11	-	-	-	200	150	20	30	0.1	0.51	0.51	-
												-	-	
X. MILK, MILK PRODUCTS														
WOMAN'S MILK	69	88	1.2	4	-	-	20	50	30	15	0.1	0.06	0.06	4
WHOLE COW'S MILK	60	88	3.3	3.2	-	-	50	150	120	90	0.03	0.03	0.03	1
GOAT'S MILK	68	86	3.4	4	-	-	50	200	110	100	0.03	0.05	0.04	1
SUGAR CONDENSED WHOLE MILK	322	26	7.5	8	-	-	150	300	300	230	0.1	0.07	0.09	-
SUGAR CONDENSED SKIMMED MILK	282	28	9	0.2	-	-	150	300	300	230	0.1	-	0.09	-
WHOLE MILK POWDER	472	4	26	24	-	-	400	1250	1000	700	0.5	0.27	0.28	-

FOOD 100g	**calories**	**WATER fr g**	**NUTRIENTS fr g**				**MINERAL SALTS in mg**					**VITAMINS in mg**		
			PROT	**LIP**	**HC**	**FIBERS**	**N / A**	**K**	**California**	**P.**	**Fe**	**Vitamin A**	**Vitamin B1**	**Vitamin C**
SKIMMED MILK POWDER	346	4	35	0.7	50	-	500	1500	1200	900	0.50	0.01	0.35	-
SOY MILK	35	91	3.4	1.5	2.1	-	-	--	21	47	0.70	-	0.09	-
YOGURT	58	88	3.3	3.2	4.1	-	50	150	120	90	0.30	0.03	0.03	-
LEAN CHEESE	82	81	8	1.5	3	-	50	-	-	-	-	-	-	
XI. FAT BODY														

BUTTER (Salted-200mg Na)	751	155	0.5	83	0.4	-	500	15	15	20	-	1	-	-
HULE	900	-	-	100	-	-	-	-	-	-	-	-	-	-
COCONUT OIL	886	-	-	98	-	-	-	-	-	-	-	-	-	-
PALM OIL	892	0.7	-	99	0.3	-	-	-	-	7	-	2.5	0.01	-
COD LIVER OIL	900	-	-	100	-	-	0.1	-	6	-	-	24	-	-
MARGARINE	751	15	0.5	83	0.4	-	300	5	-	20	-	0.6	-	-
SORBITOL	400	-	-	-	-	-	-	-	15	-	-	-	-	-
MAYONNAISE	738	16	1.3	80.8	1.3	-	367	37	-	45	0.9	48	0.03	1
XII. SUGARS														
JAM	280	20	0.5	-,	70	-	250	500	100	30	10.0	-	0.02	5
HONEY	380	20	0.5	-	75	-	3	20	5	18	0.5	-	0.01	1.5
XIII. DRINKS														
CORN BEER	33	93	0.6	0.2	3.5	-	ten	25	4	6	1.4	-	0.01	-
SORGHUM BEER	31	93	0.5	-	3.6	-	ten	25	1	7	0.6	-	0.04	-
BANANA BEER	44	89	0.1	-	9.4	-	ten	-	5	1	1.0	-	-	-
COCA-COLA	44	88	-	-	11	-	-	-	5	18	-	-	-	-
PALM TREE SAP	42	88	0.3	-	11	-	-	-	2	6	0.4	-	0.01	14
PALM WINE	34	94	0.4	0.4	1.5	-	-	-	2	5	0.5	-	00.3	4
BEER CATEGORY 1 (alcohol 4.4g)	46	90	0.4	-	3.4	-	4	35	-	-	-		0.03	-
BEER CATEGORY II (alcohol 3.4g°	34	94	0.3	-	2.2	-	3	22	-	-	-		0.3	-
XIV. DIVERS														
BAKER'S YEAST	100	71	12	0.5	12	8.4	-	-		1900	-	-	1.7	-
FOOD YEAST	340	8	45	2	35	1	180	2000	100	-	18	-	-	-
BROWN SUGAR	380	-	-	-	95	-	-	-	20	209	-	-	-	-
DRY HIPPOPOTAM	368	13.3	80.6	2.6	0	0	-	-	3	36	9.1	0	0.04	0
PAIN (TREE A)	85	75.9	1.4	0.4	21.3	2.1	-	-	25	102	2.4	0.005	0.08	32
NUOC- MAN (Pepper sauce)	61	62.1	12.8	0.7	0	0	-	-	14		0.9	-	0.02	-

4. PRESENTATION OF DATA

Table No. 2: Product, price in Congolese franc, unit of measurement, average number, average mass of product sold in g in the peripheral markets of the City Province of Bandundu.

No.	product	Price in FC	Unit of measurement	Average number	Average mass in g
1	matembélé boot	1000	A boot	-	228
2	Sweet amaranth	1000	A boot		164
3	Bitter amaranth	1000	A boot		110
4	sorrel	1000	A boot		137
5	Yam	2OOOO	A boot		400
6	onion	1000		two	800
7	All	1000		two	55
8	Tomato	1000	A boot	4	200
9	eggplant	1000	A boot	4	872
ten	braise	1000	A boot	9	1000
11	Smoked fish	5000	A lot	4	123
12	Rice	500	Bamboo glass		165
13	Peanut	1400	Bamboo glass	420	128
14	Cowpea	1200	Bamboo glass	1300	142
15	Squash	1400	Bamboo glass	976	100
16	Soy	1500	Bamboo glass	1200	180
17	caterpillar	3000	A lot	34	50
18	Cassava flour	1400	One ekolo (1l)		175
19	Corn flour	1700	An eco-friendly (1l)		88
20	Wheat flour	5000	An eco-friendly (1l)		102
21	Vegetable oil	1500	75cl bottle		154
22	Palm oil	1500			154.5

Comment: This table presents the data collected on different products sold in the peripheral markets of Bandundu. These products are seasonal.

5. RESULTS

Table No. 3: Nutritional values of nutrients in grams of some foods purchased in the peripheral markets of Bandundu

No.	FOOD	UNIT OF MEASUREMENT	MASS AVERAGE	calories	NUTRIENTS fr g			
					PROT	LIPIDS	HC	FIBERS
1	MATEMBELÉ	Boot	228	121	10,032	1,368	25,764	5,016
2	SWEET AMARANTH	Boot	164	86.9	7,544	0.328	13,612	2,952
3	BITTER AMARANTH	Boot	110	69.3	5.28	0.33	11.33	2.64
4	SORREL	Boot	137	72.6	4,521	0.411	12,604	2,192
5	YAM	Boot	400	436	7.2	0.8	100	4
6	ONION		800	376	8	2.4	80	12.8
7	GARLIC		55	NO INFORMATION				
8	TOMATOES	Boot	200	36	2	0.6	6	1.4
9	EGGPLANT	Boot	872	122	4.36	0	26.16	8.72
ten	BRAISE	Boot	1000	No information				
11	FISH SMOKES	Heap	123	304	56.58	7,011	0	0
12	RICE	Bamboo glass	165	581	15,015	1,815	126.39	1,485
13	PEANUT	Bamboo glass	128	448	55.04	16.64	33.28	19.2

14	NIEBE	Bamboo glass	142	four hundred ninety seven	32.66	1,988	86.62	6,816
15	SQUASH	Bamboo glass	100	No information				
16	SOY	Bamboo glass	180	760	63	32.22	91.08	9
17	CATERPILLAR	Heap	50	167	31.15	2.3	3.25	1.1
18	CASSAVA FLOUR	Eco-friendly (1l)	175	179	12,775	2,625	42,875	4.2
19	CORN FLOUR	Eco-friendly (1l)	88	307	8.36	3.08	63,448	1,408
20	WHEAT FLOUR	Eco-friendly (1l)	102	316	10.2	2,448	63.24	2.04
21	VEGETABLE OIL	75cl	154	1386	0	0	154	0
22	PALM OIL	75cl	154.5	1378	152,955	0.4635	0	0

Comment: The data in this table are those that we calculated in accordance with the nutritional table in the Democratic Republic taken in[9]

Table No. 4: Nutritional values of foods in mineral salts in gr

Nutritional values of foods in mineral salts in gr and vitamins in mg												
No.	FOOD	UNIT OF MEASUREMENT	MASS AVERAGE(g)	calories	MINERAL SALTS in mg					VITAMINS in mg		
					N / A	K	California	P.	Fe	Vitamin A	Vitamin B1	Vitamin C
1	MATEMBELÉ	Boot	228	121	0	0	588.24	134.52	9,576	163 248	0.228	159.6
2	SWEET AMARANTH	Boot	164	86.9	0	0	672.4	168.92	14,596	1,558	0.082	104.96
3	BITTER AMARANTH	Boot	110	69.3	0	0	575.3	103.4	6.6	0.066	0.253	73.7

4	SORREL	Boot	137	72.6	0	0	291.81	127.41	6,576	0.9453	0.2329	73.98
5	YAM	Boot	400	436	52	1560	152	240	3.6	2	0.36	88
6	ONION		800	376	80	1600	240	320	4	0	0.24	80
7	GARLIC		55	NO INFORMATION								
8	TOMATOES	Boot	200	36	20	600	20	52	2.2	0.6	0.1	50
9	EGGPLANT	Boot	872	122	87.2	1744	87.2	104.64	3,488	0.00872	0.3488	87.2
ten	BRAISE	Boot	1000	NO INFORMATION								
11	FISH SMOKES	Heap	123	304	0	0	706.02	1004.91	5,781	0	0.0738	0
12	RICE	Bamboo glass	165	581	16.5	453.75	82.5	495	3.3	0	0.693	0
13	PEANUT	Bamboo glass	128	448	3.84	0	0	38.4	115.2	2,304	0	0
14	NIEBE	Bamboo glass	142	four hundred ninety seven	0	0	143.42	543.86	10,792	0.0142	1,065	0
15	SQUASH	Bamboo glass	100	NO INFORMATION								
16	SOY	Bamboo glass	180	760	7.2	3294	504	900	11.34	0.0504	1,512	0
17	CATERPILLAR	Heap	50	167	0	0	256.5	235.5	0	0	0.05	0
18	CASSAVA FLOUR	Ékolo	175	179	0	0	479.5	183.75	13.3	0.0175	0.28	350
19	CORN FLOUR	Ékolo	88	307	0	264	14.08	193.6	6.16	38.72	0.352	0
20	WHEAT FLOUR	Ékolo	102	316	5.1	408	30.6	377.4	4.08	0	0.408	0
21	VEGETABLE OIL	75cl	154	1386	0	0	0	0	0	0	0	0

22	PALM OIL	75cl	154.5	1378	0	0	9.27	10,815	0	3.8625	0.01545	0

Comment: We used proportions to determine the measurements sought .

6. DISCUSSION

The National Nutrition and Health Program (PNNS) provides:

(1) To maintain and or develop muscle mass, it is recommended to consume approximately 1.5 to 2 kg of protein per kg of body weight per day.
(2) For a sedentary person, the recommended daily amount of protein ranges from 0.80 to 0.83 per kilogram of body weight, for both men and women.
(3) It is recommended to consume 70 to 100 grams of fat per day. This quantity is expressed between 1.2g to 1.4g of lipids per kg of body weight per day
(4) For vegetables, allow 60g per day per person

A nutritional intake recommended by an adult can follow the following proportions: 55% of calories each day must come from carbohydrates (two thirds from starch and one third from sucrose), 15% from proteins, 30% from lipids Energy needs [4]of each.

Considering what we consume, it should be noted:

Firstly, the purchases and consumption of residents living on the outskirts of Bandundu City are strictly below the recommended nutritional intake. A recommendation is a rule. The achievement guarantees nutritional balance; not respecting it to the letter does not necessarily result in a male diet or a deficiency.

Secondly, the living inhabitants of the outskirts of Bandundu in particular and the City of Bandundu in general are not informed about nutritional values because there is a lot of malnutrition despite all the potential that this region has.

Third, the NGO Harvest Plus (Better harvests. Better Nutrition), which is a multi-sectoral Nutrition and Health program, invites parents to have their children consume foods up to the age of 1000 days from birth. biofortified containing vitamin A and iron[5]

And, finally, malnourished people are useless in society because they cannot produce anything good throughout their lives.

CONCLUSION :

The objective of this article was to measure the quantities (number, mass and nutritional value) of products purchased in the peripheral markets of the city of Bandundu in order to help buyers rationalize their purchases.

We purchased a total of 22 products found in these markets throughout February 2023 from which the three measurements were taken. Using a precision scale, a kitchen scale and mastrand scale and also with a bamboo glass and the ekolo (1L), we obtained the desired measurements. The simple rule of three and the use of proportion made it possible to determine nutritional values according to the food composition table in the Democratic Republic of Congo.

This article is not intended to replace the recommendations received from your doctors or pharmacists but rather provides relevant information which allows you to rationalize your purchases and consumption.

Thus, we invite each of us to know the quantities that they buy and also that they consume in nutritional intake.

We propose the following studies for the future:

-Measure monthly and annual nutritional intakes consumed by residents of the city of Bandundu

-comparative study of the nutritional intakes consumed by the inhabitants of the city of Bandundu to those of the city of Kikwit.

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