

ADDENDUM 1

RECRUITMENT AND INFORMED CONSENT FORM

THUSA PROJECT : PU FOR CHE

RECRUITMENT AND INFORMED CONSENT FORM

Title of the project: Nutritional and health status of Africans in transition

Name: No

Address:

Tel. no.:

Age:

Are you pregnant?

Are you lactating?

Do you suffer from diabetes? Hypertension? Other disease?

When did you have your last meal?

or anything but water to drink?

INFORMED CONSENT

I, the undersigned
 (full names in print), have read the details of the project or, have listened to the oral explanation thereof, and declare that I understand it. I have had the opportunity to discuss relevant aspects with the researcher and declare that I voluntarily participate in the project. I hereby give consent to participate in the project.

.....
Signature of volunteer

Witnesses

.....

Signed at on

For subjects under the age of 21, signed consent of a parent or legal guardian is necessary.

I, (full names) the parent/legal guardian of the person named above, hereby consent that he/she may participate in the THUSA project.

Signature Date

Relationship

ADDENDUM 2

**THE THUSA PROJECT:
INFORMATION FOR PARTICIPATING CLINIC SISTER**



**Potchefstroom University
for Christian Higher Education**

**The THUSA project
Information for participating clinic sisters**

Dear Sister

Thank you for being willing to help us in organising this very important project. We are sure that the project will contribute to improved health of all the people of the North West Province.

The aim of the project is to get enough information regarding the level of urbanisation, eating patterns, life-style and certain health indicators, to plan appropriate health and nutrition intervention strategies.

For the baseline survey, which will be done from February 1996 to March 1997, we need 2 500 subjects who must be representative of the African population of the North West. These subjects will be drawn in matched groups from randomly selected traditional rural areas, from farms, from squatter camps, from urban towns and cities and also from professional people. Therefore, 500 subjects from 5 different levels of urbanisation will be needed. To control for seasonal influences, we will examine only a quarter of each group (\pm 128 subjects) during a specific visit. A visit will be from a Monday morning 08:00 to Friday afternoon 12:00. During each visit, we would like to get subjects from 4 different areas or points (around a clinic for example). Therefore, 32 subjects from four different places in your area. In total, the 128 subjects measured during our visit to your area, must include

- 64 men, aged 15-65 and
- 64 women, aged 15-65.

We would appreciate it if the ages are evenly distributed, as follows:

12 or 13 men or women in each 10 year span: 15-25; 25-35; 35-45; 45-55; 55-65.

What do we need from you?

- To help us to set up the survey in your area. We will visit you for final arrangements at least two weeks before the field **visit** (survey) date. You must please help to identify the places where we can get subjects to participate.
- We would need 2 or 3 rooms either in a clinic, hospital, school or other building to work in. If possible, also \pm 5 tables and 10 chairs.
- We would need a nurse or another leader in the community to help with the motivation and recruitment of healthy subjects. In other words, to explain the project to the subjects in their mother-tongue and to get signed informed consent to take a blood sample. To ask subjects to bring their ID with them.
- We would need a nurse (one or more) to help with the taking of the blood samples. We will show the nurse exactly how the sample should be taken. We will centrifuge the sample and do all other measurements ourselves.
- Please note, we **will not test for HIV or AIDS**. Sterilised disposable needles, syringes and gloves will be used.
- Additional subjects for every diabetic person and people suffering from diseases will have to be recruited.
- If possible, we would need a nurse to assist with the blood pressure measurements.
- We have motivated for funds to pay an honorarium to all helpers. If these funds realise, we plan to pay R10 per hour per helper.

We will visit your area on the following dates:

..... for preliminary talks and arrangements of main visit.

..... for actual survey

- While in your area, we will be staying at
- Please call (018) 299 2481 or 299 2469 for further information.

Kind regards

PROF. H.H. VORSTER

ADDENDUM 3

**THE THUSA PROJECT:
INFORMATION FOR PARTICIPATING CLINIC SISTER
WHAT IS THE THUSA PROJECT?**



Potchefstrooms University
for Christian Higher Education

The THUSA project

Information for participating clinic sisters

- **What is the THUSA project?**

THUSA stands for **T**ransition, **H**ealth and **U**rbanisation of **S**outh **A**fricans. In the project the effects of a change in eating patterns and life-style on health during the movement from rural to urban areas will be monitored. The main aim is to plan appropriate interventions that will ensure good health for all. During the baseline survey from February 1996 to March 1997, health indicators and eating patterns of Africans living in remote rural areas, on farms, in squatter camps and established towns and cities in the North West Province will be measured.

- **Why is the project so important?**

In all developing countries, the transition from rural to urban life-styles has been characterised by an increase in the diseases of over-nutrition such as obesity, diabetes, high blood pressure, stroke, heart disease and certain forms of cancer. We know that it is possible to alleviate **hunger** and **under-nutrition** and at the same time to **prevent** over-nutrition, if people are helped to make the right food choices.

In this project we want to analyze the situation in the North West so that our Department of Health and Developmental Social Welfare will know which strategies to follow to ensure optimal nutrition and health for all. Therefore, by participating in this project, you will help all the people of the North West.

- **What will be measured in the project?**

- ◆ Eating and drinking habits – food and nutrient intakes
- ◆ Socio-economic background
- ◆ Medical history
- ◆ Activity levels
- ◆ Smoking habits
- ◆ Weight, height, waist, hip and arm measurements
- ◆ Clinical signs of malnutrition (appearance of hair, skin, eyes, thyroid)
- ◆ Blood sample: markers of nutritional status and disease. Please note,

NO HIV or AIDS testing

- ◆ Urine sample: excretion of minerals
- ◆ Blood pressure
- ◆ Diabetes

- **Who may participate?**

Healthy Africans living in the North West Province who are between 15 and 65 years of age. People will be asked to participate and may refuse. Therefore, only **volunteers** will be asked to sign the informed consent form to participate.

- **What are the benefits for you?**

Many health and nutritional status indicators of yourself will be measured. You will receive feedback during which a member of the investigation team will explain your health risk to you. You will receive dietary advice and will be referred to your clinic or doctor if necessary.

- **What do we expect from you?**

- ◆ Please bring your ID; we need to know your birth date.
- ◆ We will appreciate it if you will be fasting on the day of your participation. It means that for 10 – 12 hours before your blood sample is taken, you must not eat or drink anything but pure water.
- ◆ You will be asked to sign a form giving consent to participate in the project.
- ◆ We will ask you a number of questions regarding your health, age, income, family, smoking and drinking habits, etc.
- ◆ Then you will receive a **number** for the project.
- ◆ You will be weighed and measured.
- ◆ We will take your blood pressure to determine stroke risk.
- ◆ You will be asked to give us a urine sample.
- ◆ We will then take a blood sample with a thin, sterilised butterfly needle and a number of small sterile syringes.
- ◆ Your temperature will be taken (orally).
- ◆ Your finger will be pricked twice to measure blood sugar. You will also be asked to drink a sugar cool drink.
- ◆ You will be questioned in detail about your eating habits.
- ◆ Every third person will be asked to participate in a blood pressure project.
- ◆ You will receive journals to read while you wait!
- ◆ If you have any questions about the project, please do not hesitate to ask any one of the fieldworkers.

Thank you for your participation!

ESTÉ VORSTER

ADDENDUM 4

GREEN CARD

ADDENDUM 5

DEMOGRAPHIC QUESTIONNAIRE



Potchefstroom University
for Christian Higher Education

Subject number

Date

D	M	Y
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Place

Interviewer

Home address

Sex	Male	1
	Female	2

Age

Date of birth

D	M	Y
---	---	---

First Language	Tswana	1
	Afrikaans	2
	English	3
	Xhosa	4
	Zulu	5
	Other	6

Second Language	Tswana	1
	Afrikaans	2
	English	3
	Xhosa	4
	Zulu	5
	Other	6

What is your marital status?	Never married	1
	Married	2
	Divorced	3
	Widowed	4

Do you suffer from:	High blood	Yes	1
		No	2
	Diabetes	Yes	1
		No	2
	CHD	Yes	1
		No	2
	Stroke	Yes	1
		No	2

Does anyone in your family suffer from:	High blood	Yes	1
		No	2
	Diabetes	Yes	1
		No	2
	CHD	Yes	1
		No	2
	Stroke	Yes	1
		No	2

Do you take medicine regularly?	Yes	1
	No	2
If yes – what do you take?		

Do you snuff?	Yes	1
	No	2
Do you smoke?	Yes	1
	No	2
If no – have you smoked regularly before?	Yes	1
	No	2
If yes – what do you smoke?	Cigarettes	1
If other – describe		
	Tobacco/pipe	2
	Other	3
How much do you smoke?	per day	
	per week	
For how long have you been smoking (years)		
Calculate pack years		

What is your highest qualification?	None	1
	< Std. 6	2
	Std. 6-8	3
	Std. 6-8 + trade	4
	Std. 9-10	5
	Std. 9-10 + trade	6
	Std. 9-10 + academic	7

What is your occupation?

Do you have a job at the moment?	Yes	1
	No	2

If yes – what kind of job?

On which days of the week do you work?	Irregular (piece work)	1
	Part time (1-4 days)	2
	Full time (5-6 days)	3

How much money do you earn per month?	R0-100	1
Is it between	R101-500	2
	R501-1000	3
	R1000-2000	4
	R2000-3000	5
	R3000+	6

What is the source of this income?

Do you receive any additional pensions?	Yes	1
	No	2

How much pension do you receive per month?

<i>Interviewer - Re-evaluate final income category</i>	R0-100	1
	R101-500	2
	R501-1000	3
	R1000-2000	4
	R2000-3000	5
	R3000+	6

Who else contributes money to your household? How much?

<input type="text"/>	Yes	1
<input type="text"/>	No	2
<input type="text"/>		
<input type="text"/>		

Who else contributes other resources e.g. food, sharing work/chores to your household? Specify!

	Yes	1
	No	2

Does any member of your household have the right to use any property as his/her own?

Yes	1
No	2

What type of property?

How do you use it?

Please name the members of your household

Member	Age	Education	Present job

What type of house do you live in?	Traditional	1
	Mokuku	2
	Brick house	3
	Other	4
Specify other		

Do you share a toilet with other households?	Yes	1
	No	2

What type of toilet do you have?	Communal	1
	None	2
	Bucket system	3
	Outside long-drop	4
	Outside chemical	5
	Outside water flush	6
	Inside water flush	7

Where do you get your drinking water from?	Fountain, river	1
	Communal tap	2
	Tap on premises	3
	Tap in house	4
	Other	5
If other specify		

Do you have access to electricity inside your house?	Yes	1
	No	2

What type of stove do you have?	None	1
	Coal/wood	2
	Gas or paraffin	3
	Electric	4

What type of fridge do you have?	None	1
	Paraffin	2
	Gas	3
	Electric	4

How long have you been living here? (years)	
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Where did you live before coming here?	Rural area	1
	Farm	2
	Squatter camp	3
	Township	4

ADDENDUM 6

ANTHROPOMETRY

ANTHROPOMETRY

Subject ID#

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Gender (1 = M, 2 = F)

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Projection box + constant

		.	
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Skinfolds

Triceps			.						
Subscapular			.						
Iliac Crest			.						
Supraspinal			.						
Abdominal			.						
Front Thigh			.						
Medial Calf			.						

Girths

Arm - Relaxed			.						
Arm - Fully flexed/Tensed			.						
Forearm - Maximum			.						
Waist - Minimum			.						
Hip (Gluteal) - Maximum			.						
Thigh - 1cm below gluteal fold			.						
Thigh - Mid trio-tib lat			.						
Calf - Maximum			.						

Breadths

Humerus (cm)			.				
Wrist (cm)			.				
Femur (cm)			.				
Ankle (cm)			.				

Other

Mass (kg)			.		
Stature - Stretched (cm)			.		

ADDENDUM 7

FEEDBACK FORM



Potchefstroom University
for Christian Higher Education

The THUSA project

Feedback to participants

Dear Participant

No.

Name:

Your tests have shown that

- Everything measured were normal, no signs of disease
- You must see your clinic or doctor to check for:
 - goitre
 - high blood pressure
 - blood sugar (diabetes)
 - anaemia
 - heart disease
- You must try to loose weight
- You must include more of the following foods in your diet
-
-
-

Thank you for participating in this project.

ADDENDUM 8

**ADDITIONAL SERUM RESULTS PER INSULIN
SENSITIVITY QUARTILE**

BLOOD VALUES FOR MEN PER QUARTILE OF INSULIN SENSITIVITY

IS quartile	Stats	S-Na	S-K	S-Cl	S-CO2	S-Ca	S-Mg	S-Prot	S-Alb	S-Glob	S-GGT	S-ALT	S-AST	S-LD
1	Mean	137.9	3.9	102.9	19.0	2.3	0.8	73.2	43.7	29.5	48.6	18.4	28.1	123.9
	N	33	33	33	33	33	33	33	33	33	33	33	33	33
	Std.	5.0	0.3	4.0	2.6	0.1	0.1	5.4	4.4	4.9	53.5	34.0	21.9	28.6
	Minimum	123.5	3.4	93.5	15.5	2.0	0.7	63.6	34.9	21.6	15.4	4.8	14.6	63.2
	Maximum	146.4	4.9	110.6	24.7	2.6	1.0	84.9	53.9	42.9	216.9	204.0	116.8	199.8
2	Mean	138.4	4.1	102.6	19.8	2.3	0.8	75.3	44.2	31.1	34.6	12.1	23.4	134.0
	N	32	32	32	32	32	32	32	32	32	32	32	32	32
	Std.	4.4	0.4	3.3	2.9	0.1	0.1	5.2	4.1	5.4	27.0	5.7	9.0	27.3
	Minimum	128.3	3.4	98.0	14.6	2.1	0.7	66.1	34.6	21.1	11.8	6.1	14.3	90.9
	Maximum	146.3	4.8	109.9	25.1	2.5	1.0	85.4	55.2	45.4	135.4	28.3	64.0	212.2
3	Mean	138.0	4.1	102.3	19.3	2.3	0.8	73.7	43.8	29.9	50.8	14.5	30.7	140.5
	N	33	33	33	33	33	33	33	33	33	33	33	33	33
	Std.	3.7	0.3	3.0	2.5	0.1	0.1	5.7	4.5	6.5	75.8	10.0	21.6	38.0
	Minimum	127.6	3.1	93.5	14.3	1.9	0.6	65.3	27.7	23.5	8.2	7.5	14.3	86.1
	Maximum	143.2	4.9	107.2	24.6	2.5	1.0	89.4	51.9	52.1	408.4	55.7	102.1	269.2
4	Mean	138.7	3.9	102.1	19.2	2.2	0.8	73.7	43.0	30.6	40.6	11.5	26.5	138.4
	N	33	33	33	33	33	33	33	33	33	33	33	33	33
	Std.	3.2	0.3	4.0	2.1	0.1	0.1	6.4	4.1	6.2	56.8	5.1	13.9	28.1
	Minimum	130.7	3.4	88.3	15.6	2.1	0.7	65.2	35.8	21.8	8.5	5.0	12.4	89.9
	Maximum	145.6	4.5	112.0	23.3	2.4	1.0	92.3	52.3	49.2	252.6	31.1	94.3	228.2

BLOOD VALUES FOR WOMEN PER QUARTILE OF INSULIN SENSITIVITY

IS quartile	Stats	S-Na	S-K	S-Cl	S-CO2	S-Ca	S-Mg	S-Prot	S-Alb	S-Glob	S-GGT	S-ALT	S-AST	S-LD
1	Mean	137.6	3.9	103.6	18.6	2.3	0.8	73.4	42.0	31.3	27.9	10.8	19.1	136.1
	N	44	44	44	44	44	44	44	44	44	44	44	44	44
	Std.	3.7	0.3	2.7	2.6	0.1	0.1	6.1	4.8	5.8	31.3	8.3	7.9	31.4
	Minimum	129.5	3.0	98.0	12.8	2.1	0.6	62.9	24.9	24.5	7.8	3.4	10.2	84.1
	Maximum	145.7	4.7	110.4	24.0	2.5	1.0	91.4	51.4	55.1	189.2	56.0	59.0	214.6
2	Mean	138.1	4.0	104.3	19.4	2.3	0.8	73.9	42.3	31.6	28.5	11.3	20.0	141.4
	N	43	43	43	43	43	43	43	43	43	43	43	43	43
	Std.	3.5	0.3	3.1	2.3	0.1	0.1	6.3	3.6	5.1	22.3	6.8	5.9	34.2
	Minimum	126.4	3.4	97.0	14.3	2.0	0.6	61.3	33.1	24.3	7.8	3.6	11.5	76.3
	Maximum	143.9	4.8	111.1	25.2	2.5	1.0	93.5	51.7	50.6	112.3	46.7	38.5	229.0
3	Mean	138.6	4.0	105.0	18.7	2.2	0.8	73.2	42.5	30.7	25.2	13.6	22.5	138.7
	N	44	44	44	44	44	44	44	44	44	44	44	44	44
	Std.	3.0	0.3	3.4	2.2	0.1	0.1	6.4	3.9	5.9	17.7	17.7	19.3	28.8
	Minimum	129.0	3.4	97.0	13.1	2.0	0.7	62.0	33.0	21.9	6.8	3.8	9.7	57.6
	Maximum	145.0	5.2	112.4	22.5	2.5	1.0	87.2	50.0	53.6	85.6	118.8	130.0	211.5
4	Mean	138.2	3.8	103.7	18.7	2.2	0.8	72.4	41.2	31.1	38.5	12.5	22.9	141.6
	N	44	44	44	44	44	44	44	44	44	44	44	44	44
	Std.	3.8	0.4	3.6	2.2	0.1	0.1	6.7	4.2	7.2	63.1	8.6	12.9	32.1
	Minimum	128.7	2.8	94.3	14.2	1.9	0.6	57.8	31.1	23.7	7.8	3.4	11.9	77.8
	Maximum	145.2	4.5	111.3	24.4	2.4	1.0	99.1	50.2	67.6	377.7	51.0	93.1	231.8