



EFFICACY OF Fish **& MEDICINAL MUSHROOMS**

A Community Study by
The Kenneth Kaunda
Children of Africa
Foundation



Sponsors

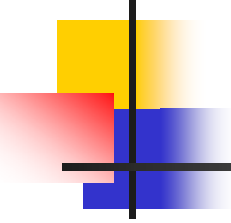
- UNDP [ZERI Project]
- Regional HIV/Aids [Sida]
- World fish

Mentors : Prof S.T Chang/ Prof Mshigeni



The Problem

- HIV as a Pandemic
- Pandemic Response



“ Doctors must understand nutrition otherwise the nutritionists will become the Doctors”

By a famous nineteenth Century
American Physician



MICRONUTRIENTS - ZERO





Maize In Sub-Saharan Africa

100 YEARS OR MORE

FINGER MILLET

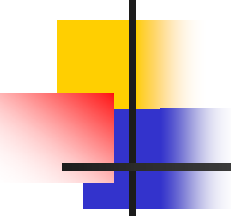
SORGHUM

MASS FEEDING / transport/ storage

A GOOD SOURCE OF ENERGY/Population

NUTRITIONAL CONTENT ?

Micronutrient content of Maize



VITAMINS /microg	WHOL	DH	DGM
■ THIAMINE	4.7	4.4	1.3
■ RIBOFLAVIN	0.9	0.7	0.4
■ NIACIN	16.2	13.9	9.8
■ PYRIDOXINE	5.9	5.4	1.9
■ FOLATE	0.3	0.2	0.1

Mineral Content of Maize



■ CALCIUM	30.8	26.7	14.5
■ PHOSPH	3,100	2,500	800
■ ZINC	21	17.7	4.4
■ IRON	23.3	19.7	10.8

Vitamin Deficiency [niacin]



29.03.2006

Post-Intervention



Vitamin Deficiency-Pellagra



Before and after fish intervention & Nicotinamide



Pellagra



Pellagra-family



Wasting Syndromes-HIV [1]



13.01.2009



13.01.2009



Advanced HIV/Aids [Wasting]

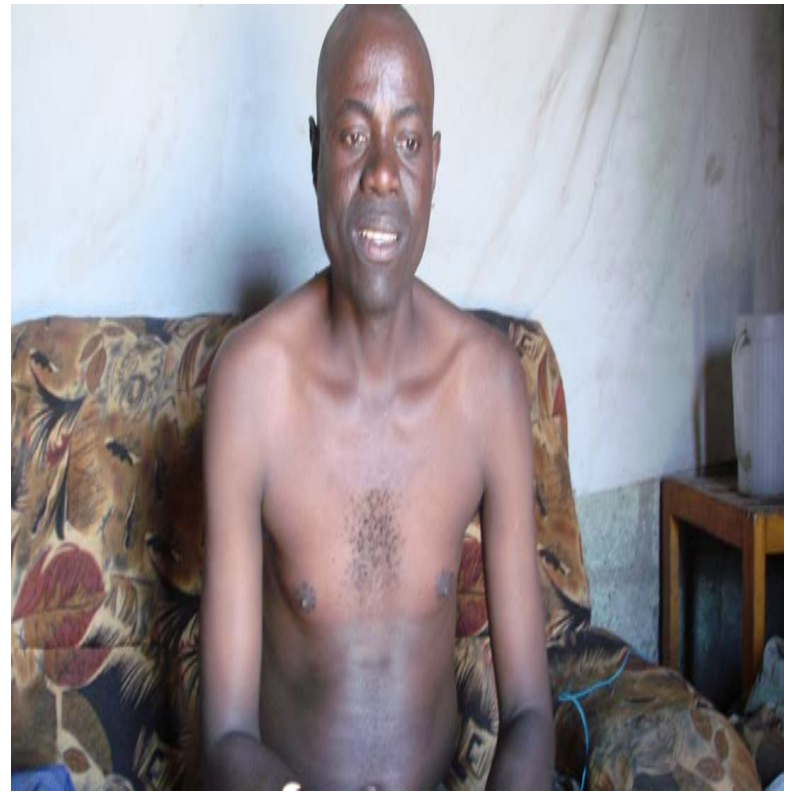
- Food [very important]
- Oral Fluids [*Coca Cola*]
- Medicinal Mushrooms
- HAART [ART]



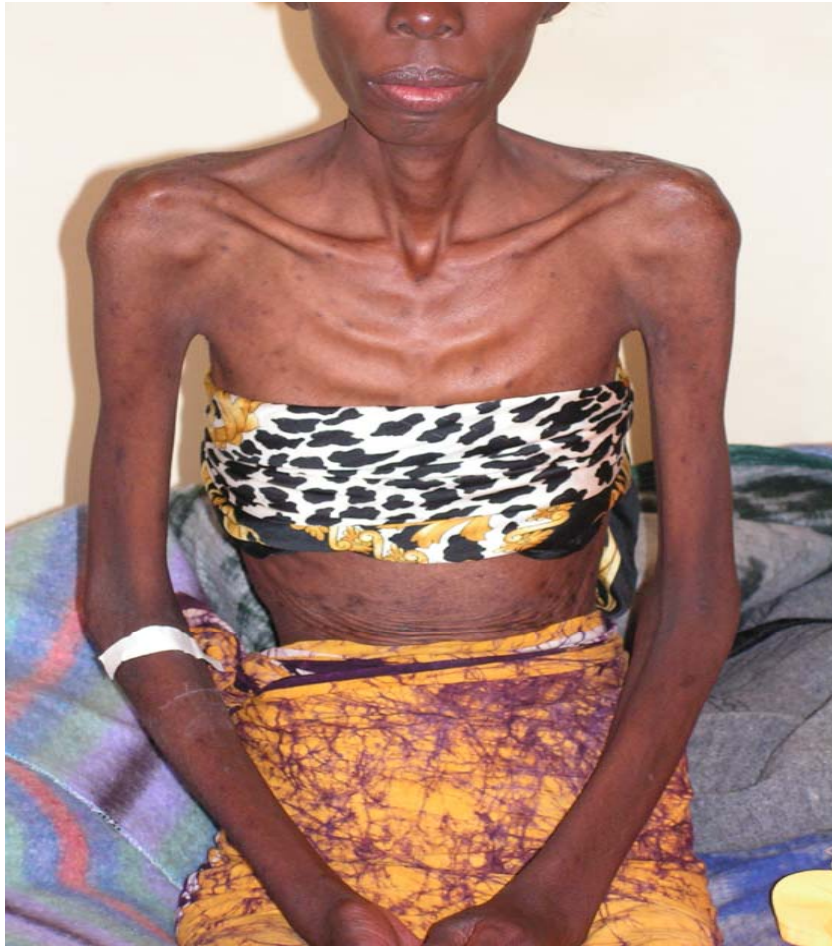
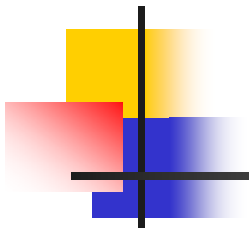
1. Fluids 2. Food 3. OIs 4 Functional food 5.ART



13.01.2009



02.09.2009



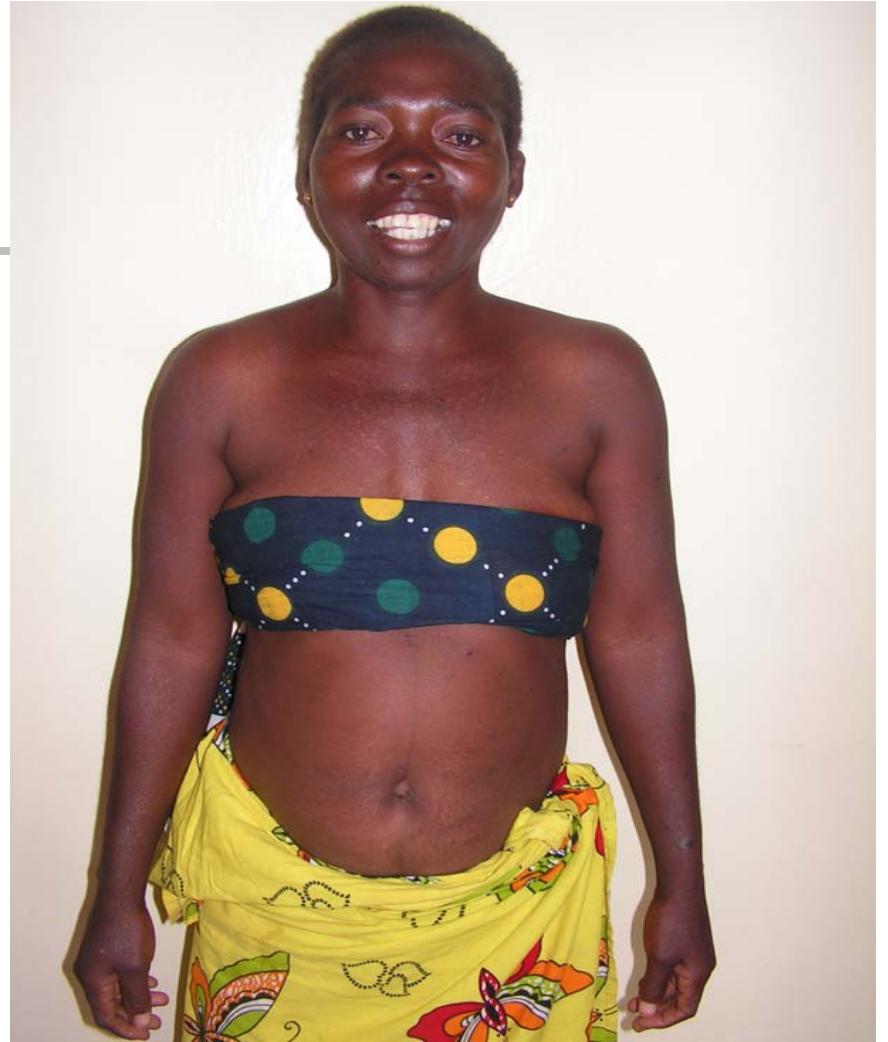
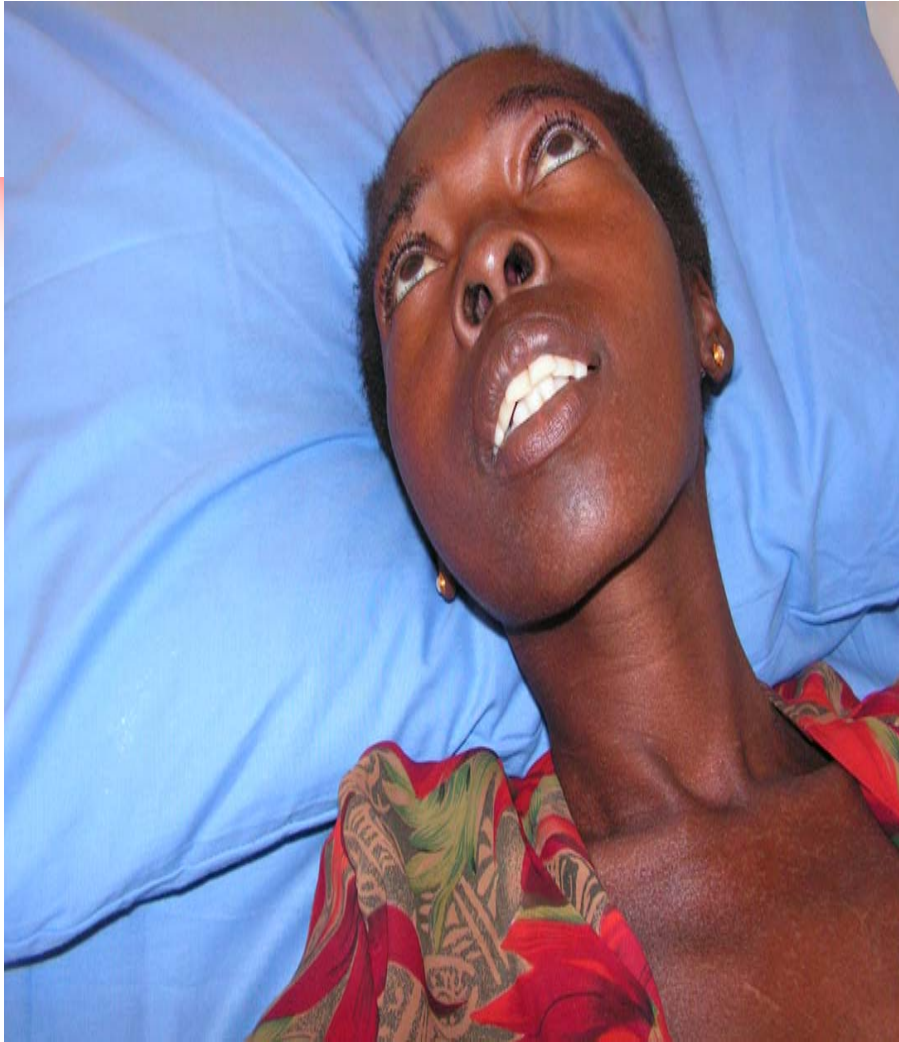


MM & Opportunistic Infections



Keep The Mother Alive







HIV negative babies?





Side effect 1 [Increased Fertility]- UNFPA

- 28 babies were born in the programme after taking medicinal mushrooms
- Increased Fertility
- Babies HIV negative in the majority after pmtc [ART during labour]

Effect of MM on Wound healing





Chronic Wounds in Africa

- Chronic wounds common in Africa
- Poor Nutritional Status
- Post-Operative or Trauma/accident
- Post Infective / related to HIV/Aids



Objectives of the study

- Document the effect of medicinal mushrooms & Fish on wound healing in

1.HIV patients

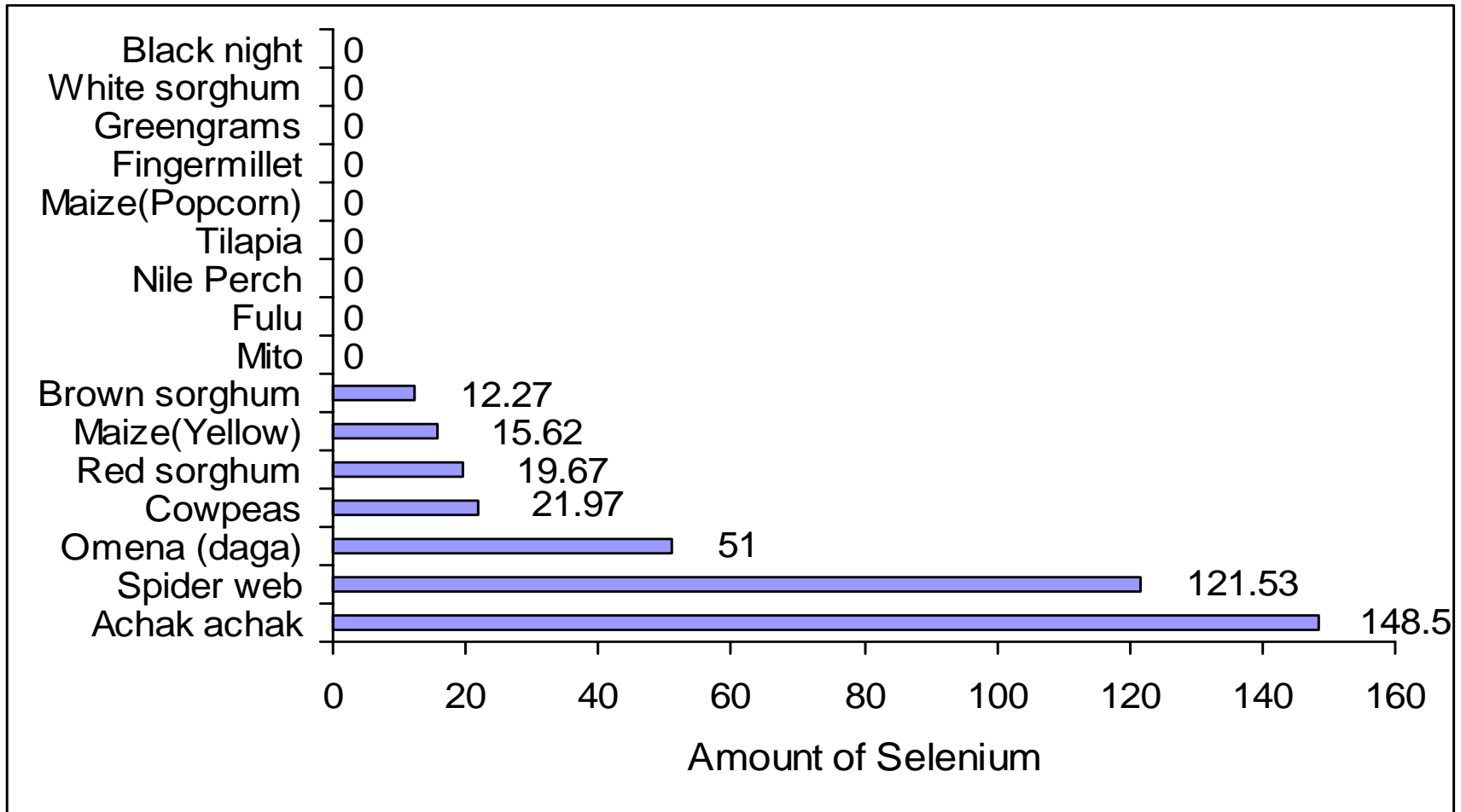
2.None HIV

Food interventions in HIV/Aids?





Amount of Selenium in foods (mas/ka)





Kapenta Vs fcp

■ Iron	72	77mg/kg
■ Vitamin B12	280	360 ug/Kg
■ Protein	72.8	72.9



Amino Acids

■ Tryptophan	8.15	8.31g/Kg
■ Leucine	51.1	54.1
■ Isoleucine	30.3	34.5

HIV patients with Wounds

- Fish & 350 mg Cordyceps/Ganoderma Lucidum /T. versicolor



HIV +Ve on mm Duration One Year [CD4 count 289]



07.05.08 [7 weeks to closure]



19.12.08.

Fungal & Bacterial Infections



HAART & Medicinal mushrooms





15.10.08



03.11.08



05.02.09



26.02.09

Medicinal Mushrooms + HAART



After the restarting MM mushroom & ART



Wounds for 5 years [MM & HAART]



10.04.08



15.04.08



Medicinal Mushrooms & HART



18.04.08



2.05.08

HIV -ve patients with wounds



Ganoderma Sp

Duration: 2 years

Commenced on ganoderma for 2 months None-reactive



19.03.08



25.03.08

Wound closed after one month on mm



24.04.08

Stopped MM for three months wound re-opened



18.11.08

None Reactive [normal CD 4 count]



[1 month duration NR]

Chronic Wounds





01.09.08[NR]



01.09.08[CD4 748]



01.09.08[NR]



01.09.08[CD4 748]



22.09.08



05.09.08



22.09.08



Chronic wounds None - Reactive



Chronic wounds



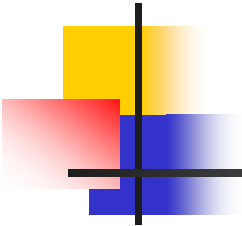
Diabetic Wounds



1.02.06.2008
[CD4 802]

Diabetic foot after mm only





19.02.08

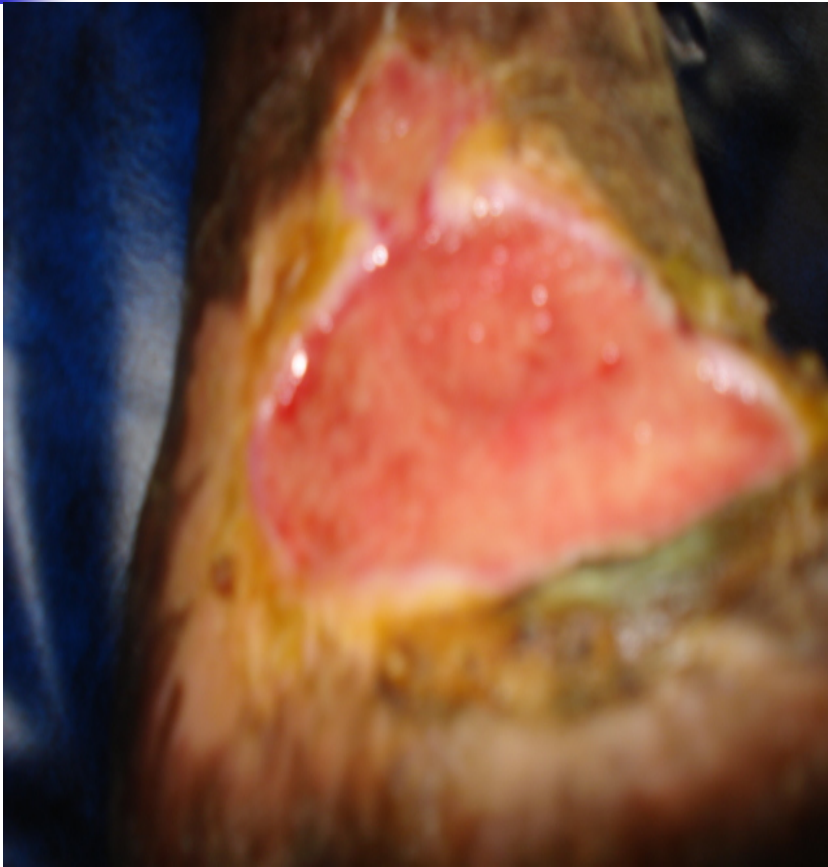


12.03.08

Chronic wounds after medicinal mushrooms



Slow Responders



S/Responders





Autoimmune Diseases in HIV/Aids [2]

- Diabetes mellitus
- Psoriasis
- Rheumatoid arthritis [HIV/Aids]
- Erythema Multi-forme [HAART]



Psoriasis in HIV/Aids



03.02.08

Psoriasis [MM & HAART]



03.02.09



19.04.08

Erythema multiforme due to Nevirapine MM only [8 cases]



MM only[No steroids]

Rheumatoid arthritis [HIV+ HAART]- No response to MM



- **Diclofenac**
- **Brufen**
- **NSAID**
- **Medicinal Mushrooms**

8 Patients with RA [no response]



Drug Interactions of MM [Bleeding]

- Brufen
- Aspirin
- Diclofenac
- Ciproflaxin

Slow responders



09.03.09 [stopped MM]



02.09.09

Chronic Osteomyelitis [ART & Med Mushroom – Low dose medicinal mushrooms.





Nodular regression



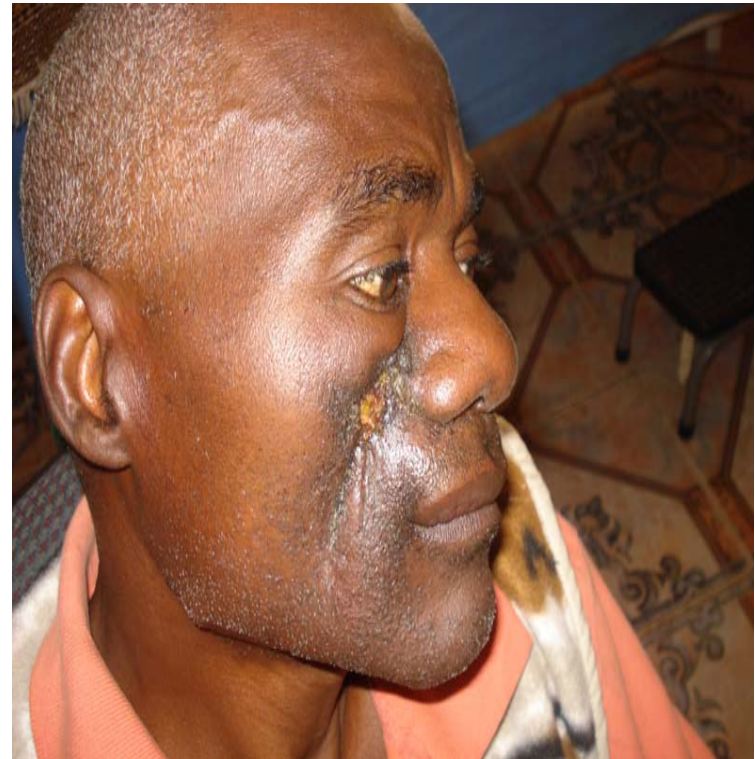
04.06.2008
[MM]



11.08.08

Basal carcinoma[rodent ulcer] MM + Radiotherapy





11 days after Radiotherapy



Chronic eczema on mm



05.09.08



05.09.08



22.09.08



22.09.08

Eczema with secondary infection [antibiotics & mushrooms]



03.09.08



22.09.08



06.10.08



20.10.08



04.06.08



02.07.08



Eczema





Chronic Eczema [MM]



28/07/.08



27/10/08

Medicinal Mushrooms & Scabies intractable



Scabies



MM & scabiolol

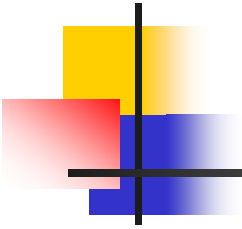
Septic Arthritis



25.07.2008



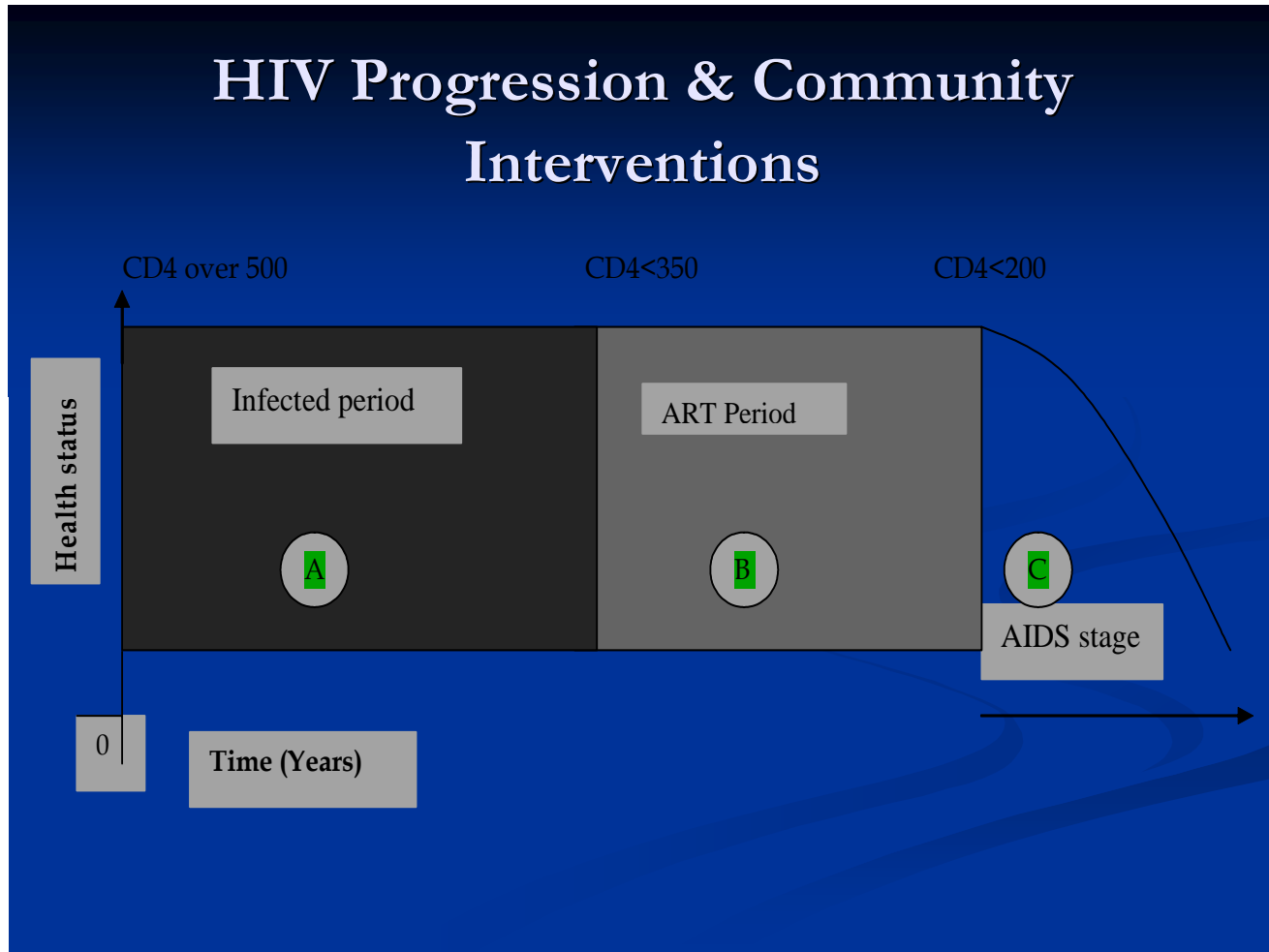
11.08.2008



26.02.09

After Benin/ possibilities

HIV Progression & Community Interventions



CD₄200

HAART

mm

CD₄ > 200

mm

HAART

CD₄ > 350

mm



Community Training MM/fish

1. Health Ministers
2. Communities
3. Medical doctors
4. Pharmacists
5. Surgeons



Nutrition and the fishing communities



Greetings to Benin from The KKCAF

