

# Malting improves complementary porridges energy density

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## Key messages

- Traditional complementary porridges are usually characterized by low energy and nutrient density below the recommended values.
- The developed complementary flours may help to improve the nutritional status of children under 24 months.
- The developed complementary flours can be produced and sold by beneficiaries thus create jobs and generate revenues.

## Objectives and approaches

### Objectives

- Compare the effect of three different malted flours on the viscosity and energy density of complementary porridges for children under 24 months;
- Evaluate the conservation time of the malted flour on the viscosity and energy density of complementary porridges.

### Approaches

- Malting of cereal crops and preparation of the complementary flour.
- Porridge preparation and measurement of the parameters.

## Key results

- Maize, millet, and sorghum malts have similar effect on viscosity and energy density of complementary porridges for children.
- Malting improves the viscosity and energy density of complementary porridges for children.
- After 12 months of conservation, malted flours still have good effect on viscosity and energy density.
- Plastic containers are better than plastic bags for cereal crop flour conservation.

## Significance

All cereals crops can be used to make malted flours. The malt represents a good way to improve the energy density of complementary porridges for children. It is an easy and practical technique to improve the nutritional status of malnourished children. The developed complementary flours can be produced and sold by beneficiaries, thus create jobs and generate revenues.

## Scaling potentials

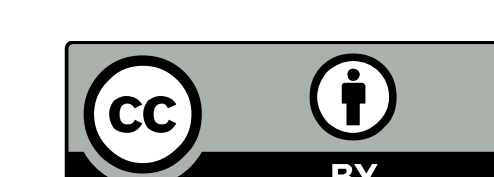
- Training of trainers in all sites
- Training of direct and indirect beneficiaries.

By using the training of trainers strategy, five (5) trainers per village will train 10 direct beneficiaries. Each of which will train 10 indirect beneficiaries. At the end, 2500 beneficiaries will be trained.

## Partners



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Photo 1: Germination of millet grains in Bougouni



Photo 2: Technicians participating in the development of composite flour at Bougouni

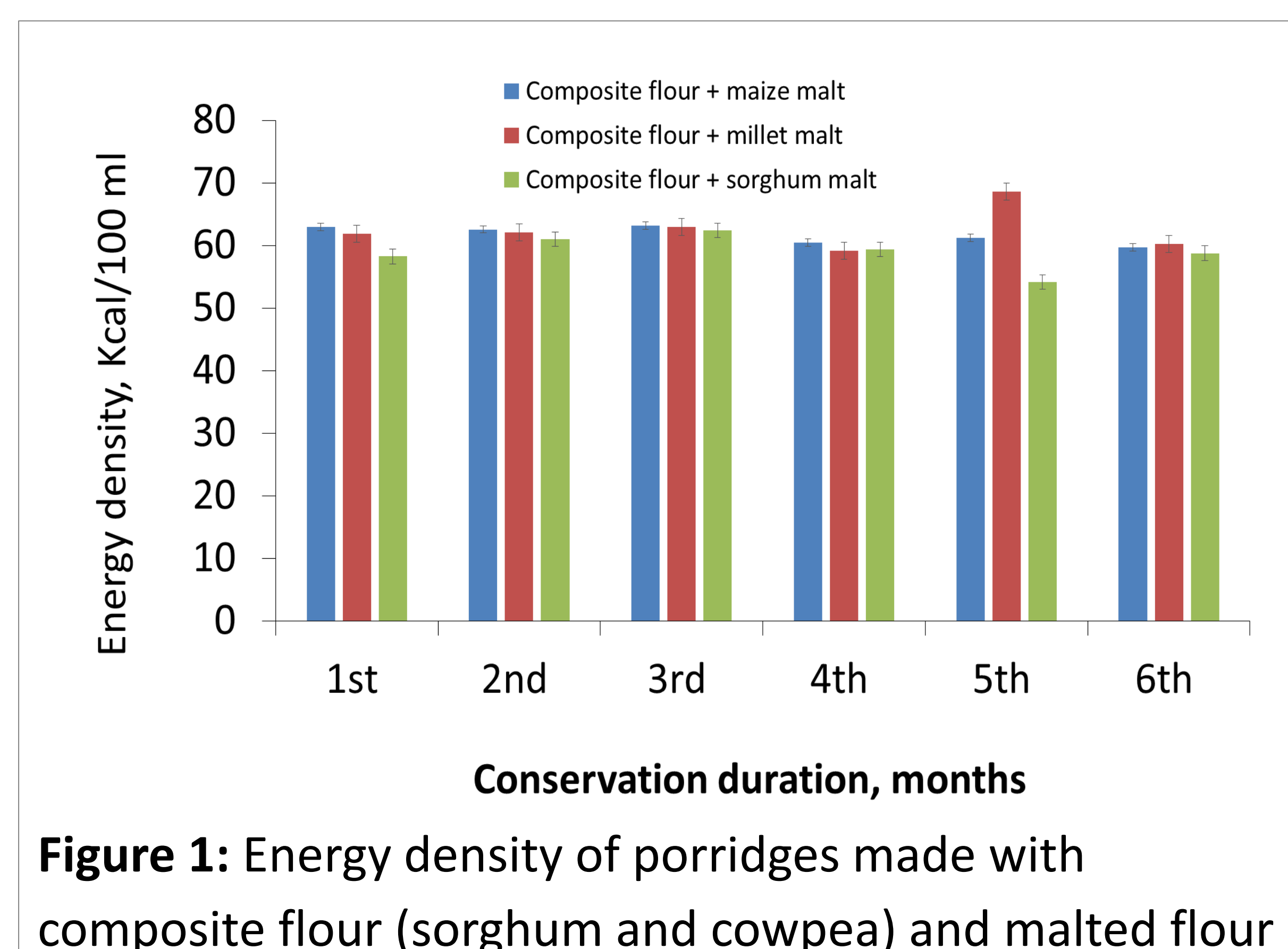


Figure 1: Energy density of porridges made with composite flour (sorghum and cowpea) and malted flour