St **A**ndrews **N**utrition **S**creening **I**nstrument (**SANSI**)

St Andrew's HEALTHCARE

Nutrition and Dietetics

Paper version of SANSI

Why screen?

- Identifies patients at nutritional risk
- Prompts intervention, care planning and monitoring
- To raise staff awareness
- To fulfil good healthcare governance

Why screen?

- Recommended practice;
- DoH 2007, Council of Europe 2003, NICE 2006
- Care Quality Commission; Oct 2010, meeting nutritional needs is 1 of 16 requirements
- Commissioners; quality indicator

Weight management and screening

- Most widely used tool is the Malnutrition Universal Screening Tool (MUST)
- MUST focuses on undernutrition in care settings
- Obesity, weight gain, disordered eating, therapeutic diets etc. not highlighted
- Severe metal illness (SMI) has been linked to higher risk of diabetes and heart disease.
- Mental Health Group of BDA; many found services have needed to develop local tools

St Andrews' Screening Tool - SANSI

- Work started 2007, coincided with weight management initiative
- Includes elements of MUST,

  significance of BMI and weight change (+ and -)
- Additional mandatory questions on key issues: restricted diets, disordered eating, diabetes, dysphagia
- Trialled as a paper tool, feedback sought

We then built SANSI into RiO electronic patient notes

- No calculations needed for BMI or % weight change
- Hyperlink to BMI charts (age related)
- BMI graphs generated overview of progress
- Action plan recommended on risk identified
- Hyperlink to intranet resources
- Link to Weight Management Care Pathway
- Piloted live in June 2009, training needed
- Included in policy, audit

How to screen

- Weigh accurately and recheck height if needed
- Observe pattern of eating and any other risks
- Follow the 4 easy steps
- It is St Andrew’s policy to complete this each month

St Andrew's Healthcare Nutrition Screening Instrument (SANSI) Paper copy

St Andrew's Healthcare Nutrition Screening Instrument (SANSI)

Patient ID: Date: Completed by:

Step 1: Current weight and BMI

Weight (kg)	
Height (meters)	
Body Mass Index (BMI)	
BMI category	

See table 1 on how to calculate BMI and table 2 and 3 for age and gender related BMI category

If unable to weigh, or patient refuses, is patient visibly:

□ underweight □ healthy weight □ overweight?

Underweight →	high risk - refer to dietitian
Healthy weight →	low risk - continue to weigh and screen monthly
Overweight →	medium risk - offer first line weight management information/support
Obese →	high risk - offer first line weight management information/support and consider referral to dietitian

Step 2: Weight change in the last 3-6 months

Weight 3-6 months ago (self reported if records not available)	.....kg
% Weight change	.....%

% weight change = ((new weight-old weight)/old weight) x 100

Change of 0-5 % weight →	low risk- continue to weigh and screen monthly
Change of 5-10% weight →	medium risk- alert clinical team to monitor intake, activity levels, weight
Loss of 10% weight or more (unplanned) →	high risk- refer to dietitian
Gain of 10% weight or more (unplanned) →	high risk - offer first line weight management information/support and consider referral to dietitian

Step 3: Other significant dietary issues to consider

If **YES** to any of the below, alert clinical team, care plan, and refer to dietitian if appropriate (NBM = Nil By Mouth e.g. if patient fed via a gastrostomy)

Does the patient have specific dietary requirements (e.g. allergies, vegan, cultural/religious diet, renal diet)?	Yes / No
Is patient being fed by/have a nasogastric feeding tube or gastrostomy tube?	Yes / No
Is the patient prescribed nutritional supplements?	Yes /No
Does patient have Diabetes (type 1 or type 2)?	Yes /No
Does the patient have a history of/ been observed to have disordered eating?	Yes / No
Does patient have a history of excessive fluid intake?	Yes / No
Does the patient regularly refuse or not attend 2 or more main meals a day?	Yes/ No/ NBM
Does patient fail to eat at least half of their serving at most meal times?	Yes/ No/ NBM
Does the patient regularly refuse or not complete drinks?	Yes/ No/ NBM
Does the patient have any chewing or swallowing difficulties?	Yes/ No/ NBM
Does the patient suffer from nausea, involuntary vomiting or diarrhoea?	Yes/ No/ Sometimes
Are whole food groups (e.g. dairy products, fruit & vegetables) avoided?	Yes/ No/ NBM

Step 4: Action Plan/ Comments

No immediate action □ Alert clinical team □ Refer to dietitian □	Comments

Table 1: How to calculate BMI

$$\text{BMI} = \frac{\text{weight (kg)}}{(\text{height x height}) \text{ (m)}}$$

Table 2 Approximate BMI ranges for age: Females

Age	BMI = Underweight	BMI = Healthy	BMI = Overweight	BMI = Obese
12	Below 15.5	15.5 to 22.4	22.5 to 25.4	25.5 and above
13	Below 16.0	16.0 to 22.9	23.0 to 25.9	26.0 and above
14	Below 16.5	16.5 to 23.9	24.0 to 26.9	27.0 and above
15	Below 17.0	17.0 to 24.4	24.5 to 27.4	27.5 and above
16	Below 17.5	17.5 to 24.9	25.0 to 27.9	28.0 and above
17	Below 18.0	18.0 to 25.4	25.5 to 28.4	28.5 and above
18 +	Below 20.0	20.0 to 24.9	25.0 to 29.9	30.0 and above

Table 3 Approximate BMI ranges for age: Males

Age	BMI = Underweight	BMI = Healthy	BMI = Overweight	BMI = Obese
12	Below 15.0	15.0 to 21.4	21.5 to 23.9	24.0 and above
13	Below 15.5	15.5 to 21.9	22.0 to 24.4	24.5 and above
14	Below 16.0	16.0 to 22.9	23.0 to 25.4	25.5 and above
15	Below 16.5	16.5 to 23.4	23.5 to 26.4	26.5 and above
16	Below 17.0	17.0 to 23.9	24.0 to 26.9	27.0 and above
17	Below 17.5	17.5 to 24.4	24.5 to 27.4	27.5 and above
18 +	Below 20.0	20.0 to 24.9	25.0 to 29.9	30.0 and above

References:

National Institute for Health and Clinical Excellence (2006) Obesity: the prevention, identification, assessment and management of overweight and obesity in adults and children. NICE, London. www.nice.org.uk/guidance/CG43

Scottish Intercollegiate Guidelines Network (2010) 115 Management of Obesity; A national clinical guideline, www.sign.ac.uk

Gender specific growth charts, Child Growth Foundation, http://www.healthforallchildren.co.uk/

Unable to obtain new weight?

If unable to weigh, or patient refuses, is patient visibly:

□ underweight □ healthy weight □ overweight?

If you are unable to obtain a new weight recording - choose from options

Do not carry over weights from previous months.

Step 1 – Current weight and BMI

Obtain actual weight and height whenever possible
- this is important to make clinical decisions

Calculating BMI:

weight (kg) / height (m^2)

Step 1: Current weight and BM

Weight (kg)	
Height (meters)	
Body Mass Index (BMI)	
BMI category	

See table 1 on how to calculate BMI and table 2 and 3 for age and gender related BMI category

If unable to weigh, or patient refus patient visibly:

□ underweight □ hea ight □ overweight?

Underweight →	high r o dietitian
Healthy weight →	low ris o weigh and screen monthly
Overweight →	mediu st line weight management information/support
Obese →	high ris weight management information/support and consider referral

Complete BMI category i.e. underweight, healthy, overweight or obese. See Table 1 and 2 for age and gender related BMI categories.

Step 2 – Weight change

Enter weight from around **3-6 months ago**.

Calculate weight change using equation provided.

Step 2: Weight change in the last 3-6 months

Weight 3-6 months ago (self reported if records not available)	……kg
% Weight change	……%

% weight change = ((new weight-old weight)/old weight) x 100

Change of 0-5 % weight →	low risk- continue to weigh and screen monthly
Change of 5-10% weight →	medium risk- alert clinical team to monitor intake, activity levels, weight
Loss of 10% weight or more (unplanned) →	high risk- refer to dietitian
Gain of 10% weight or more (unplanned) →	high risk - offer first line weight management information/support and consider referral to dietitian

A previous weight recording from 3 months ago is ideal but if not available, you can go back as far as 6 months

Step 3 – Other significant dietary issues to consider

Step 3: Other significant dietary issues to consider

If **YES** to any of the below, alert clinical team, care plan, and refer to dietitian if appropriate
(NBM = Nil By Mouth e.g. if patient fed via a gastrostomy)

Does the patient have specific dietary requirements (e.g. allergies, vegan, cultural/religious diet, renal diet)?	Yes / No
Is patient being fed by/have a nasogastric feeding tube or gastrostomy tube?	Yes / No
Is the patient prescribed nutritional supplements?	Yes /No
Does patient have Diabetes (type 1 or type 2)?	Yes /No
Does the patient have a history of/ been observed to have disordered eating?	Yes / No
Does patient have a history of excessive fluid intake?	Yes / No
Does the patient regularly refuse or not attend 2 or more main meals a day?	Yes/ No/ NBM
Does patient fail to eat at least half of their serving at most meal times?	Yes/ No/ NBM
Does the patient regularly refuse or not complete drinks?	Yes/ No/ NBM
Does the patient have any chewing or swallowing difficulties?	Yes/ No/ NBM
Does the patient suffer from nausea, involuntary vomiting or diarrhoea?	Yes/ No/ Sometimes
Are whole food groups (e.g. dairy products, fruit & vegetables) avoided?	Yes/ No/ NBM

Answer **yes**, **no** or **nil by mouth** to each question, ask others in your team if unsure.

Step 4 – Action Plan

Referral to dietitian must have a clinical reason highlighted from the previous questions.
For weight management, please check readiness for change before referring.
Initial support and information can be given by ward staff.

Step 4: Action Plan/ Comments

No immediate action □ Alert clinical team □ Refer to dietitian □	Comments

Use Steps 1-3 as a guide for actions needed

Table 1 and 2 BMI category

Table 1 Approximate BMI ranges for age: Females

Age	BMI = Underweight	BMI = Healthy	BMI = Overweight	BMI = Obese
12	Below 15.5	15.5 to 22.4	22.5 to 25.4	25.5 and above
13	Below 16.0	16.0 to 22.9	23.0 to 25.9	26.0 and above
14	Below 16.5	16.5 to 23.9	24.0 to 26.9	27.0 and above
15	Below 17.0	17.0 to 24.4	24.5 to 27.4	27.5 and above
16	Below 17.5	17.5 to 24.9	25.0 to 27.9	28.0 and above
17	Below 18.0	18.0 to 25.4	25.5 to 28.4	28.5 and above
18 +	Below 20.0	20.0 to 24.9	25.0 to 29.9	30.0 and above

Table 2 Approximate BMI ranges for age: Males

Age	BMI = Underweight	BMI = Healthy	BMI = Overweight	BMI = Obese
12	Below 15.0	15.0 to 21.4	21.5 to 23.9	24.0 and above
13	Below 15.5	15.5 to 21.9	22.0 to 24.4	24.5 and above
14	Below 16.0	16.0 to 22.9	23.0 to 25.4	25.5 and above
15	Below 16.5	16.5 to 23.4	23.5 to 26.4	26.5 and above
16	Below 17.0	17.0 to 23.9	24.0 to 26.9	27.0 and above
17	Below 17.5	17.5 to 24.4	24.5 to 27.4	27.5 and above
18 +	Below 20.0	20.0 to 24.9	25.0 to 29.9	30.0 and above

Case study - Meet Julie

Julie is a 35 year who had an active lifestyle before becoming mentally unwell

Step 1 - current weight

- She weighs 73kg
- Objects to having her height taken but is reliable and recalls being 5ft 6in - use the conversion chart to convert to 1.68m
- BMI is 26 so Julie is overweight
- Use links for advice leaflets to avoid further gain

Case study - Meet Julie

Step 2 - weight change

- She started a new antipsychotic and is less active
- 68kg on admission 3 months ago, so a 10% gain
- This prompts the weight management pathway to be started and an MDT care plan drafted.

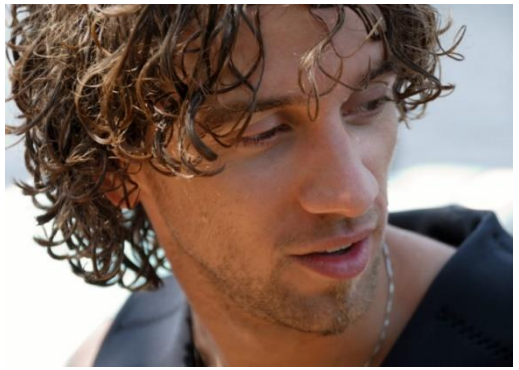
Step 3 - other significant dietary issues to consider

- Yes- whole food groups are avoided.
- Julie is avoiding carbohydrates at mealtimes in attempt to lose weight but filling up on snacks.

Step 4 - action

- Information given on healthy eating, encouraged to pick up activity she had enjoyed
- **Outcome -** Weight is being managed

Case study - Meet James



James is a 19 year old man

Step 1 - current weight

- He is 1.8m tall, weight 64kg, BMI 20

Step 2 - weight change

- He was 71kg 3 months ago, a 10% loss. Staff have noticed clothes are now loose fitting.

Step 3 - other significant dietary issues to consider

- Staff note that he is reluctant to come to the dining room for lunch and evening meal, will eat quickly and then ask to leave. He can eat well at other times and when off the ward, for example at the on-site café.

Case study - Meet James

- **Step 4:**

  Team review mealtimes/ seating/ snack meals

  Care plan drafted

Outcome:

- By screening, the clinical team is aware of James's weight loss and dietary issues, and solutions
- This has avoided further weight loss with it's physical and psychological consequences:

  - impaired immune response to infections
  - muscle wasting and weakness
  - apathy and depression