MEALTIME
PULSE OXYMETER STUDY

GENERAL GUIDELINES

1 BASELINE
SpO2 and pulse normals outside of eating. This is best done for one minute just before mealtime.

2 MEALTIME RANGE
Impact of eating on SpO2 and pulse once coordination of respiration and swallowing has begun. This is compared to the baseline.

> **SIGNIFICANT IF**
> SpO2 drops into 80's. SpO2 does not rebound into 90's (best if 93% plus.) Values decline steadily over course of meal. Pulse rate increases and stays excessively elevated without returning close to baseline rate.

3 LENGTH OF MEALTIME
Mealtimes which require longer than 30 minutes to complete place the person at risk for fatigue leading to further problems with coordination of respiration and swallowing.

4 COUGHING EPISODES
Observe amount of coughing during mealtime and its effects on SpO2 and pulse. A good clearing cough should result in a rise in SpO2 to 95% or greater, facilitating 02/CO2 exchange.

Generally, a poor or inadequate clearing cough will not affect the SpO2or cause it to drop even further. Excessive coughing during mealtime can increase fatigue and increase the risk of aspiration.

5 COUGHS WITH COLOR CHANGES
Generally indicates aspiration of mucus/food/fluids in significant amounts. If either wheezing or apnea episodes are also present, the overall seriousness of the aspiration episode increases.

6 DECLINE OF SpO2 DURING AND/OR SHORTLY FOLLOWING MEALTIME
Answer "yes" or "no" by comparing the average SpO2 during the meal to the average baseline. Many individuals are experiencing "silent aspiration". Decline of SpO2 values into the 80's can indicate aspiration even if coughing is not present. Decline of SpO2 values after mealtime may be indicative of the onset of reflux with aspiration. Readings are observed at 5 minutes and 30 minutes after the meal.

7 OXYGEN SATURATION
SpO2 during eating and drinking is also recorded in terms of the highest, lowest, and most common value. If SpO2 values are below normal limits (95%), they are further evaluated according to what percentage of time is spent below 90%, 85%, 80%. Many individuals with chronic respiratory diseases (COPD, ARDS) have lower baseline SpO2 values. These individuals may normally run between 80-85%.

8 INADEQUATE SpO2 DURING MEALTIMES
Decreases alertness and general CNS function, which includes movement in the oral structures. Hinders the efficiency of coordination of respiration and swallowing.

MEALTIME
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Name _____ **Date** _____

Assessed by _____

Time Start: _____

Time End: _____

Baseline SpO2 _____ **Pulse** _____

Mealtime Range SpO2 _____ **Pulse** _____

Length of Mealtime _____

Coughing Episodes _____

Single Coughs _____

Coughs with Color Change _____

Decline of SpO2 During _____ **Following** _____

Five Minutes Post Meal

SpO2 _____ **Pulse** _____

Thirty Minutes Post Meal

SpO2: _____ **Pulse** _____

Oxygen Saturation (SpO2)

Highest _____ Lowest _____ Avg. _____

Percent of Time Below

90% _____ 85% _____ 80% _____

Interpretation

_____

_____

_____

_____

_____

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MEALTIME
PULSE OXYMETER STUDY

GENERAL GUIDELINES

Name Jim Jones

Date 2/2/17

Assessed by K. Green, RN

Time Start: 12:15pm

Time End: 12:45pm

Baseline SpO2 95%   **Pulse** 90

Mealtime Range SpO2 91–98   **Pulse** 89–108

Length of Mealtime 22 min.

Coughing Episodes 3

Single Coughs 0

Coughs with Color Change 0

Decline of SpO2 During none   **Following** none

Five Minutes Post Meal

SpO2 92 for 2 min, then 93–98   **Pulse** 99

Thirty Minutes Post Meal

SpO2: 95 steady   **Pulse** 99

Oxygen Saturation (SpO2)

Highest 98   **Lowest** 91   **Avg.** 94–99

Percent of Time Below

90% 0   **85%** 0   **80%** 0

Interpretation

1) Minimal fluctuation in SpO2/pulse during meal.

2) SpO2/pulse minimally changes from baseline during meal.

3) Three single coughs w/l 30 minute post-meal period. SpO2 and pulse not significantly affected.

4) No "wet" respirations noted during or after the meal.

5) Position upright in wheelchair with head in midline and neutral position.