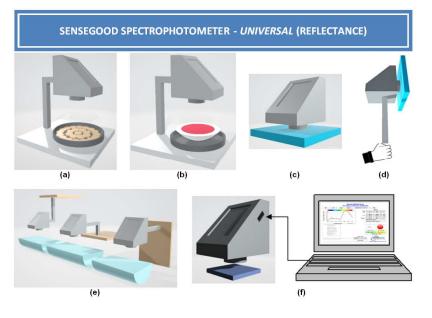# Color measurement and quality control in meat

Meat color is directly associated with its freshness. Meat supplier can control storage and process parameters to maintain meat freshness.

Typical color of meat from different species	
Species	**Color**
Fish	Pure white to gray-white or pink to dark red
Lamb and mutton	Light red to brick red
Pork	Grayish pink
Poultry	Gray-white to dull red

SENSEGOOD SPECTROPHOTOMETER - *UNIVERSAL* (REFLECTANCE)

(a) (b) (c) (d)

(e) (f)

✓ Benchtop/ Tabletop: (a) (b) (Rotating sample platform)
✓ Handheld/ Portable: (c) (d)
✓ Online/ In-process: (e)

✓ Solid: (a) (c) (d) (e)
✓ Liquid: (b) (e)
✓ Paste: (b) (e)
✓ Powder: (a) (b) (e)

✓ Contact measurement: (c) (d)
✓ Non-contact measurement: (a) (b) (e) (Adjustable height)

Works with:
✓ 5V adapter (cell phone charger)
✓ Power bank
✓ Computer/ Laptop (f)

✓ Averaging
✓ Auto repeat measurement mode
✓ Color match percentage
✓ Color indices (whiteness, yellowness, …)

✓ *SensegoodSmart* – computer interface software utility

Sensegood spectrophotometer for color quality and consistency control in meat products:
Sensegood spectrophotometer is an analytical color measurement instrument that is widely accepted in the industry and research fraternity. It comprehensively evaluates the color attributes of various samples, including solids, liquids, powders and pastes. Sample can be non homogeneous with different shape and size. Sensegood spectrophotometer has rotating sample platform with large viewing area (sensor's field of view). It takes multiple measurements over number of rotations and generates average result representing the sample's color.

Sensegood spectrophotometer helps in picking up even the slightest color difference over the production batches. It helps in finding difference between two colors and shows result in percentage match.

Sensegood spectrophotometer also incorporates continuous auto measurement mode. In this mode, it wakes up at user selectable intervals, takes measurement, compares the sample color with the saved reference, displays percentage match, and alarms to the operator with beeping sound in case if the matching percentage

is below preset threshold. It has provision for averaging option in normal mode as well as in auto repeat measurement mode.

Measured CIE L*a*b* values indicate strength of color parameters like: bright or dull, red – green and yellow – blue respectively. Measured color is also represented as reflectance graph, peak wavelength and color temperature on color touch LCD. Sensegood spectrophotometer is non-messy non-contact type instrument which has benefit of measuring sample's color from a distance. Because of this, sensor remains scratch proof enabling long life in retaining calibration. Non-contact measurement avoids any sample contact and contamination on sensor measuring surface. Hygiene is maintained, as non-contact measurement avoids any food contact and bacterial accumulation on sensor measuring surface. Sensegood spectrophotometer is the versatile device that is engineered to work as handheld/portable, benchtop/table-top or in-process/online color measurement instrument.

Sensegood spectrophotometer provides computer interface software *SensegoodSmart* which lets you to convey numeric color data across all production plants that may be located at multiple places across the globe. Each production plant uses Sensegood spectrophotometer to compare color attributes of the product manufactured in their plant with the numerical color information received from central plant or management. This enables them to reproduce each product consistently across all the plants. This feature is highly desirable for wide spread industry with plants at various places. It also assists in color consistency in packaging material supply chain.