

# Avicenna MUST Kit (Macroscopic Urine & Stool Test Kit)

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## ABSTRACT

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In 2010 Global Burden of Disease study was conducted in which “CKD was ranked 27<sup>th</sup> in the list of causes of total number of deaths worldwide in 1990, but rose to 18<sup>th</sup> in 2010 because they do not have access to affordable treatment”. Many physicians and their patients remain unaware of the diversity of clinical characteristics of renal disease. That’s why it is termed as Silent Killer. Though, the early diagnosis is the only way to prevent from CKD and it can be possible only by physical examination of urine. The aim of this study was to develop a new diagnostic tool which can detect this silent killer at early stages. An extensive literature review regarding ancient diagnostic techniques and evidences of Uroscopy with special focus on Ibn-Sina’s idea on the techniques for collecting and examinations of the characteristics of urine in healthy and sick individuals was compiled along with the methods described in the Campbell Walsh’s Text book of Urology. After two years of research work the world’s first “Avicenna MUST KIT” was designed which consisting of Avicenna Must Chart (comprises on urine and stool color charts and other physical examination parameters of urine and stool), an Illuminator, a flat bottom flask and literature for using KIT. This preventive medicine method is one of the main approaches used by Avicenna in the diagnosis of kidney diseases. By using this KIT a person can make a habit to self-examine urine & stool, so that a little change can be detected at early stages of disease development. So the *Keep an Eye on the Silent Killer* can play a pivot role in prevention from CKD.

**Keywords:** Avicenna MUST Kit, CKD a silent Killer, Urine color chart.

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## EXECUTIVE SUMMARY

One of the main approaches used by Ibn-Sina (Avicenna) in the diagnosis of kidney diseases is based on a detailed examination of the urine. Ibn-Sina’s idea on the techniques for collecting and examinations of the characteristics of urine in healthy and sick individuals are similar to the methods described in the Campbell Walsh’s Text book of Urology which is also known as “Bible of Urology”. MUST KIT is all about the 21<sup>st</sup> century interpretation of 10<sup>th</sup> century philosophy of Avicenna in such a way that traditional and modern healer could get maximum benefits from the wisdom of the great Islamic Physician known as the “Doctor of Doctors”.

## THE IDEA

This KIT having (i) A Chart entitled “Avicenna MUST Chart ” with a subtitle ‘Keep an Eye on the Silent Killer’ (ii) MUST Illuminator (iii) A Round flask (iv) Literature regarding the guidelines that how to use the MUST KIT. The Macroscopic Urine examination test mentioned on MUST chart comprises on seven parameters such as; color (*Rang*), quantity (*Miqdar*), consistency (*Qiwam*), turbidity (*Kadorat*), odor (*Rahiya*), foam (*Zubd*) and sediments (*Rasoob*). Two parameters such as color (*Rang*) and form (*Shakal*) of stool are also interpreted in MUST Chart in the section of stool.

“Keep an Eye on the Silent Killer” is the solitary hope for the prevention from CKD which is known as a silent killer. By using this KIT a person can make a habit to self-examine his/her urine & stool, so that a little change can be detected at early stages of disease development.

## IDEA BENEFIT/DIFFERENTIATOR

Diagnosis is the heart of the medical art; it is what separates the medicine as a definite, rational science from medical magic and superstition. Diagnosis is also the central, golden link in the chain of medical knowledge that brings together all its theoretical aspects to provide the practical key to treatment. Diagnosis, to be accurate and sound, must be built upon a broad yet definite base of knowledge regarding all aspects of human anatomy, physiology and pathology. This invention is about a diagnostic tool, although many other hospitals and medical research centers across the world have also developed their own urine color charts but my aim is to build a bridge between the modern medicine and Avicenna's healing philosophies. That's why I came up with the “AVICENNA MUST KIT” which is not just about the urine colors but also gives the explanation of all 7 parameters to analyze the urine and 2 important parameters to analyze the stool. And this is first time in the history of medicine that all these parameter are designed to diagnose the CKD at early stages. I believe one can fix chronic diseases at early stages if willing to pay a little attention to the urine and stool on daily basis by using this chart. As this chart combines both the modern science and ancient wisdom, so the contemporary doctors and the traditional healers can use AVICENNA MUST CHART readily by lodging in their own way of the disease diagnosis.

## TARGET MARKET

Fact is that people suddenly can be diagnosed with end stage kidney diseases because most of the time it remains silent until it's too late. It is not also a rare disease, in fact what's been hard for us is that no one knows about this disease. “It kills more people then prostate and breast cancer combined and still no one knows”. That why we have to educate our family, friends and ourselves to look inside the body through this window.

## COMPETITION

The history of urine colour chart is far dated back to the ancient time and six famous charts have been mentioned in various historical books. One thing common among all these charts is that these portrays only one parameter of the urine diagnosis which is the urine color.

### Brief description of ancient urine color Charts

YEAR	PERSON	DESCRIPTION
4000 BC	ANCIENT CLAY TABLETS	Ancient Sumerian and Babylonian physicians were first that inscribed their assessments of urine into clay tablets as early as 4,000 B.C. They were aware of certain urine colors such as “Sinatu Pizu” which mean white urine, “Sinatu Zalmi” which means Black urine and “Sinatu Bursi” as red urine.
10 <sup>th</sup> Century	ABU YA'QUB IS'HAQ	Basing himself on Galen's humouralism, he wrote “Kitab al-Baul” a foundational treatise on urine analysis and developed world's 1 <sup>st</sup> portable flow chart of urine assessment, it was so complex that

		he claimed it can determine numerous diseases known if one knows how to use it.
<b>13<sup>th</sup> Century</b>	<b>GILLES DE CORBEIL</b>	This is the hand-colored urine chart that classify urine samples in order to help physicians in the diagnosis of diseases. It was developed by one of the first professor of medicine who taught at Medical school of Salerno. He was also the Coart physician of the king Phillippe-Auguste.
<b>14<sup>th</sup> Century</b>	<b>JOANNES ACTUARIUS</b>	An important highlight on Byzantine uroscopy is the work of Actuarius, particularly his manuscript "De Urinis" on urine in seven books. He believed in physiology based on 4 humors, but altered the theory by categorizing the body into four types of digestion, based on the temperaments.
<b>15<sup>th</sup> Century</b>	<b>JOHANNES DE KETHAM</b>	During the early 15th century, the art of uroscopy entered the domiciliary through a bestselling book "Fasiculus Medicinae" by a German physician Johannes de Ketham from. His chart has no pointing arrows to the 7 inner circles that demonstrate the different stages of percolation.
<b>16<sup>th</sup> Century</b>	<b>ULRICH PINDER</b>	This urine chart was published by Ullrich Pinder in 1506, in his book Epiphanie Medicorum. This chart describes the possible colors, odours and tastes of urine to diagnose the different disease. It has 20 deferent urine colors with a strange array of shades.

### **Present invention**

The macroscopic examination of urine with the naked eye remained a fundamental diagnostic technique even in 21<sup>st</sup> century. Indeed, it continues to be appreciated by most urologists as a highly valuable to gain essential insight into the nature and causes of various illnesses. In 21<sup>st</sup> century many researchers have developed different urine color charts but the chart by Urinary and Kidney team of the "Cleveland Clinic" which is one of the largest and most respected hospitals in the USA is worth mentioning here along with the chart by Duch Center For Personalized Medicine.

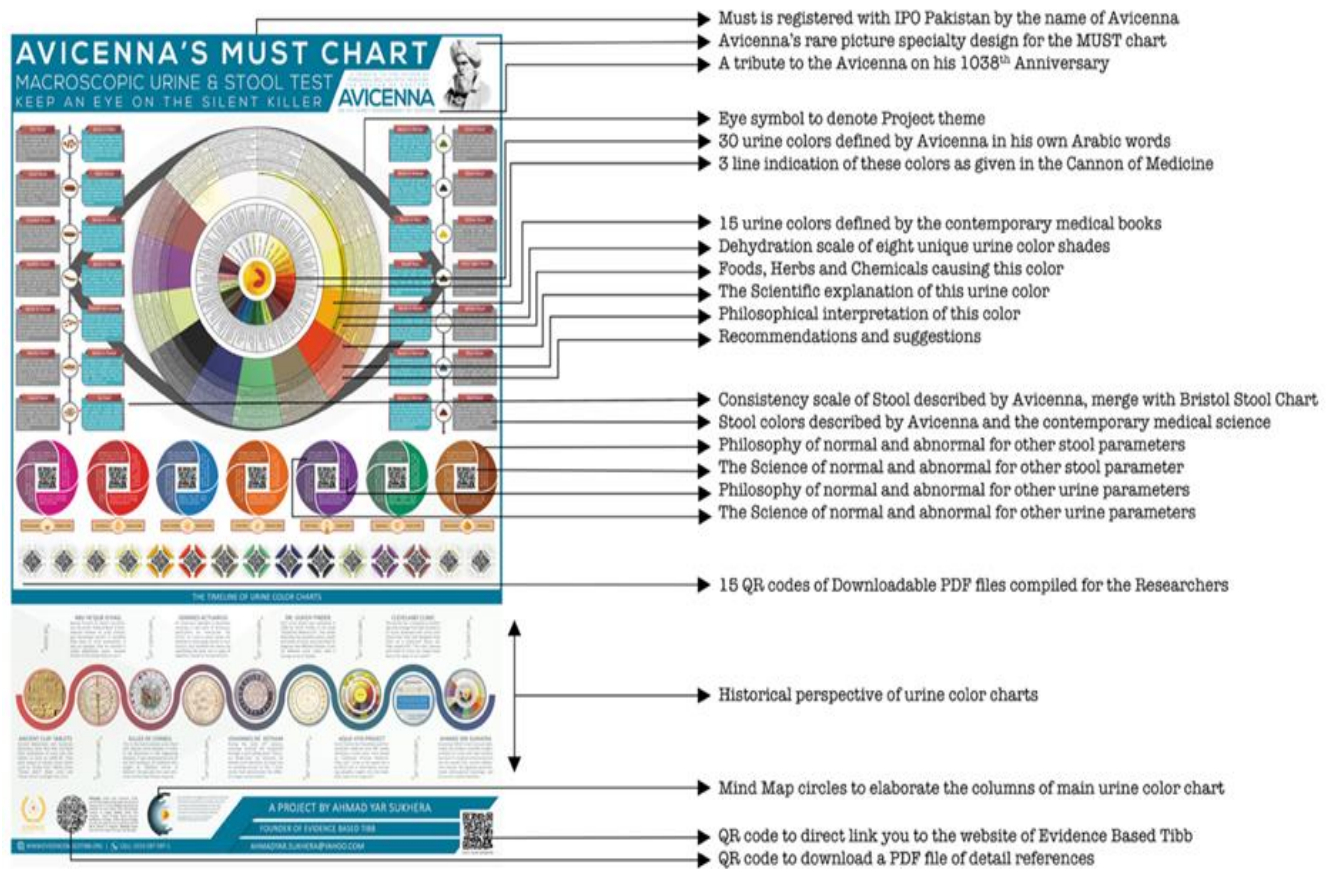
<b>YEAR</b>	<b>PERSON</b>	<b>DESCRIPTION</b>
<b>21<sup>st</sup> Century</b>	<b>AQUA VITA PROJECT</b>	Dutch Centre for Preventive and Personalized Medicine and NM centre develops a urine color chart based on traditional Chinese Medicine. They Said "Urine is not waste but a bio-fluid rich in information, providing valuable insights into the metabolic state of an organism".
<b>21<sup>st</sup> Century</b>	<b>CLEVELAND CLINIC</b>	The world's No. 1 Hospital in Cardiology & Urology from last 23 years is so much obsessed with urine color charts that they had designed their chart on a washroom tissue roll. They stated that "the color, density and smell of urine can reveal much about the state of our health".
<b>21<sup>st</sup> Century</b>	<b>DR AHMAD YAR SUKHERA</b>	Avicenna MUST chart not just elaborates the modern scientific enlightenments of urine and stool analysis but also it's medical armamentarium can be traced from ancient Babylonian schools, the Egyptian pyramids, Greek philosophical teachings, and Avicenna's Medical wisdom.

Although there are lots of urine color charts developed by the modern and traditional doctor but none of them is based on all 7 parameter of urine diagnosis and neither of them elaborates the science and ancient wisdom (Hikmat) of urinalysis. That's why I came up with the "AVICENNA MUST KIT".

### **Uniqueness of MUST Kit**

1. The word "MUST" is first time being used for Macroscopic Urine & Stool Test.
2. MUST kit is the unique and one & only in the world for naked eye urine and stool examination.
3. MUST kit is a contribution in the field of preventive and personalized medicine for the early detection of various ailments especially chronic kidney disease (CKD).
4. AVICENNA MUST CHART is the only chart in the world on which all 7 parameters of urine are elaborated.
5. AVICENNA MUST CHART is the only chart in the world on which Avicenna's wisdom of urinalysis is portrait along with its scientific justifications.
6. AVICENNA MUST CHART is the only chart in the world on which Avicenna's wisdom of stool analysis is being described along with Bristol Stool Chart.
7. AVICENNA MUST CHART is the only chart in the world on which a complete time line of all famous urine color charts is depicted.
8. AVICENNA MUST CHART is the only chart in the world on which the QR codes are being given for the details of each urine and stool parameter.
9. I am the first person who highlighted the exact 30 shades of urine colors which are being mentioned in cannon of medicine by Avicenna, 1000 years ago.
10. MUST illuminator is a unique invention to illuminate urine flask to examine urine macroscopically.

11. This invention is a tribute to the great Islamic scientist Avicenna (Ibn-Sina) on his 1038<sup>th</sup> anniversary.



### MUST Illuminator

Those who even know a little about the art of uroscopy and history of medicine cannot deny the importance of round flask which even remained the symbol of medical profession as stethoscope in modern days. In MUST kit I have not just given a 500 ml round flask but also amalgamate it with a modern illuminator which will decrease the chances of error when examining the urine with naked eye. This illuminator will also serve as the guidance for those who can't read the chart.



How to use AVICENNA MUST Chart

# HOW TO USE AVICENNA MUST CHART

## Macroscopic Urine & Stool Test

### 1st Step

Don't waste your urine before inspecting it especially in the early morning

You can always begin urinating into the flask provided you to collect all the urine you pass, so that its quantity can also be measured effortlessly



### 2nd Step

You have no idea how good your body is designed to feel and express what's going inside

Observe flask like a detective & notice its foam, viscosity, smell, color and sediments. In analysis always think of the easy first, don't over diagnose yourself.

### 3rd Step

Wash your hands with soap after performing MUST & rinse the flask with tap water after each use

Keep in mind the color code & important signs you noticed so that you can read their indications on the chart



### 4th Step

Read the particular color section & other signs on the chart that you must paste on the outside of your washroom door

Scan the QR code for further informations and don't forget to take care of your self because no one can do this better than you

## When to Consult your Physician?

Always consult your Physician whenever you feel pain on passing urine or the strange urine color associated with other symptoms.

Your feedback will be appreciated !

For queries contact

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[WWW.EVIDENCEBASEDTIBB.ORG](http://WWW.EVIDENCEBASEDTIBB.ORG)

## REQUEST

No request at this stage.

## FUTURE MILESTONES

The future direction of our work is to make a stable product, that is, a sellable medical equipment based on traditional method of urinalysis by including advanced dipstick method. We are on course of conducting researches on different parameters of urinalysis by using MUST KIT.

## THE TEAM

Ahmad Yar Sukhera (Principal Investigator)

## ADDITIONAL INFORMATION

Product is submitted for Patent to IPO Pakistan.

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