

R BBQG

BBQG

N, H Q

M Q & \* E \* A ' \* F F Q

& ,32\* / , /4\* 0,14\* 2,0. ' D R BBQGR

. \* / \* 0\* 1 BFP-0 & ? G \* L

A \* SQ? ' - - & 2. \*

0, . 6 ', ? , 32\* / , /4\* 0,14\* 2,0.

3. - / 15,0\* 62, / \* 0. 4,2\* 212,4 N \*

, ? 04

R & T-QR' U B R , Q T -T Q \*

Q K \*

BBQG

BBQG

, R

B, P C S J \* SI \* B 0. /4

B, N V \* Q K ? S & ' \* K /5

B, F E S ? 4 B \* SI \* & S S \* R L S ' ,

B, Q N O S & ' ? /5 /6 , Q

B, A P , A

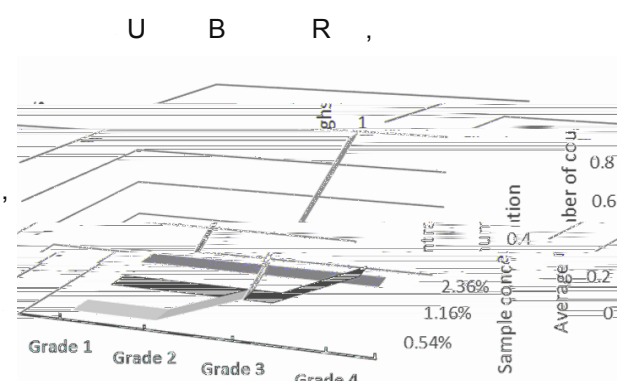
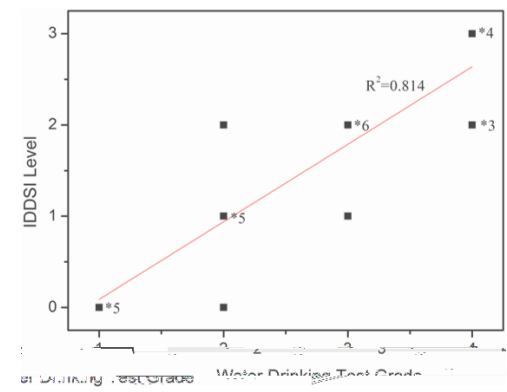
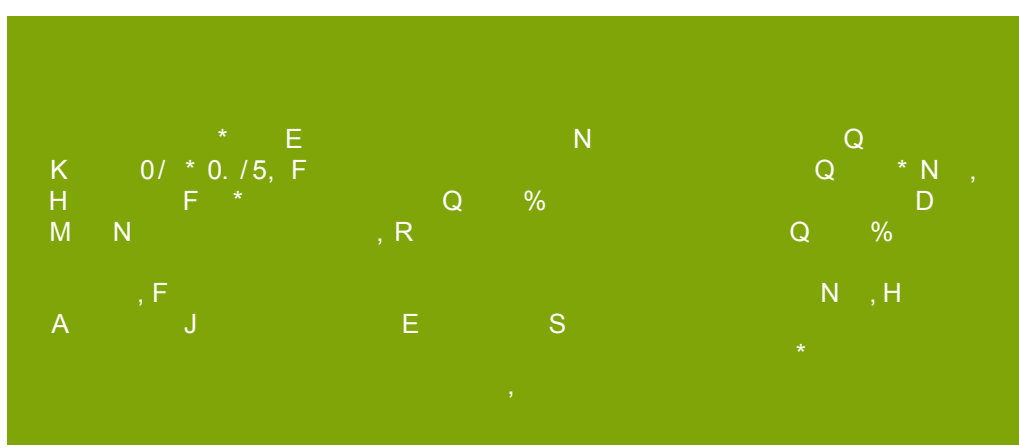
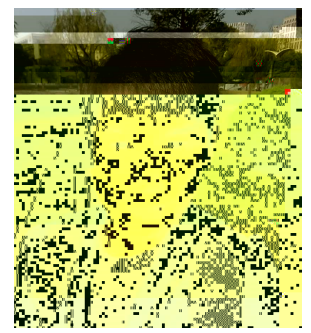


Figure 1: Coughing number when swallowing 20ml samples for patients at different grades as assessed by the Water Drinking Test.





K \* D M N P E B  
 \*0. /4, F D Q L & ' SAQGS \*  
 K \* N B D C S N K ,F R  
 S K D ? & ' A , J ,F



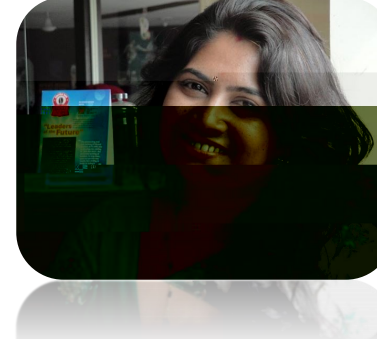
D M N  
 D ,F @  
 N B A C R S  
 O ,F N B , F  
 E S  
 ,F

I ,F @ @ S \* G \*  
 KQ @  
 D Q &NQS\* R ' N B  
 @ N  
 &SQ\* K ', Q \*  
 K S 0,3  
 ,F DMN

@ @ S  
 KQ D R ? S ,F  
 N B C Q & Q  
 C ' AQQ-A D R  
 P G &G ', F  
 @NR\*G N B,  
 F @ P ? 0. /2-0. /3  
 HEQS S



M - -  
 ,R  
 ,F  
 ? \*  
 P S \* B,  
 ,



N  
L F \* Q H  
F B 5 \* 0. / 4 \*  
S B, P J C  
SI

R  
, R  
8

\*  
?

B Q G A B \*  
F I \* K A R  
\* N , A

, R  
N , A  
, R  
, N ,  
A

R DMN

S L , G \*



M \*  
 S A Q A U  
 P A & SP\*\* L , I S  
 H , Q G , G  
 ' \*  
 S K A N R Q D L \*K

- L , L /5-16 \*0. /5\*F \*A ,
- \* S J \*? 6-// \*0. /6\*J \*SI ,
- 2 \*0. /6\*L \*SI ,

R CQG  
 0. /48  
 • R 8A \*D O  
 N \*26\*123-136,  
 • R 8 \*B \*  
 1. \*0-04,

C 8 , , \* , , ,  
 R 8&. '64 35/ 06. . 67. 2  
 D 8&. '64 35/ 06. . 67. .  
 U 8 8- , , - , = //46  
 115 203\*DMN J \*Q D Q @ \*  
 /6V Q \*H B \* E S \*F \*1/. /6\*AFG?  
 C 8 , 32 ,

- \*E, \*Q \*K, \*J \* , A \*H( &. /5', @ , B \*
- Q \*K, \* ' \*E, \*Q \*H\*J , , A \*H &. /5', A \*H &. /5', A \*H &. /5', P
- U \*V,( A \*H &. /5', D , A M A G
- K \*A,( A \*H &. /5', D - , R D Q R ,
- Q \*Q, \*S \*P, \*@ \*F, A \*H( &. /5', , H R Q \* / \* /- /5, BM& / ., / / / - , /0044,
- J \* , \*A \*H( F \*K, &. /5', F , H R
- J \*J, \*? \*R, \*C \*P, \*F \*K, A \*H( &. /5', , H
- J \*J, \*@ \*P, \*? , \*A \*H\*Q \*? , ( &. /4', 8D \*  
 R Q \*25\*2/1-200, BM& / ., / / / - , /0/7. ,
- A \*H?, ,( \*J \*N, \*Q \*A, \*K, \*F \*@ \*A \*H\*  
 B \*P, \*M, \*B \*H\* I \*H\* J \*A, \*K \*H\*  
 N \*K, \*P \*J, Q \*Q, &. /4', B

- K \*A,( A \*H, &. /5', M , C P K & , J, B \*C ,
- ? \*R, \*S \*P, ( A \*H, &. /5', M , GM K K , E, A & , \*
- J \*J, \*Q \*? , A \*H, &. /5', C , GL D D F ? , P, U & " \*C ,