Primary Prevention of Obesity and Type 2 Diabetes Mellitus

DQG UHVSHFWLYHO\ > @ ,Q WKH SHULRG RI WLPH
'HSDUWPHQW RI (QGRFULQRORJ\ -DJLHOORQLDQ 8QLYHUVLW\ &ROOHJLXP
0HGLFXP LQ .UDNRZ ZDV D PDLQ FRRUGLQDWLQJ FHQWHU IRU WKH 3ROLVK
0XOWLFHQWHU 6WXGLHV RQ 'LDEHWHV 6WDWLVWLFDO
&RPPLWWHH IRU 5HVHDUFK LQ 3RODQG RI +HDOWK
OHDGLQJ FHQWHUV IRU GLDEHWHV PHOOLWXV LQ 3RODQG WRRN SDUW LQ UHYH
KLJK SUHYDOHQFH RI WKH W\SH GLDEHWHV PHOOLWXV RYHU PLOOLRQ
GLDEHWLF SDWLHQWV PDLQO\ RYHU \HDUV ROG ZLWK KLJK FRQWULEXWLRQ
RI WKH QHZ GLDJQRVHG FDVHV QHYHU EHIRUH GLDJQRVHG DQG
WUHDWHG VR FDOOHG fXQNQRZQg GLDEHWHV > @ $V D FRQWLQXDWLRQ RI WKL
VXUYH\ ZH LPSOHPHQWHG WKH [illegible] RQ WKH PRGHO RI
WKH SHUVRQV DW ULVN DQG QRQ SKDUPDFRORJLFDO LQWHUYHQWLRQ RQ WKH
SULPDU\ KHDOWK FDUH OHYHO LQ [illegible] FHQWHUV LQ .UDNRZ
LQLWLDOO\ E\ WKH 0LQLVWU\ RI +HDOWK DQG VLQFH E\ WKH 0XQLFLSDOLW\
RI .UDNRZ WRZQ ZLWKLQ WKH IUDPHZRUN RI WKH SUHYHQWLYH SURJUDPPH
f+HDOWK\ .UDNRZg ,Q &RXQFLO RI WKH 0XQLFLSDOLW\ RI .UDNRZ
7RZQ DSSURYHG f3URJUDP IRU 3ULPDU\ 3UHYHQWLRQ RI 7\SH 'LDEHWHV
+\SHUWHQVLRQ DQG $UWHULRVFOHURVLVg IRU WKH \HDUV ZKLFK
DFWXDOO\ L[HQGHG LQ [illegible] ODWHU E\ WKH
ODWHU E\ WKH UHVXOWV RI WKH LQYHVWLJDWLRQ SUHIRUPHG LQ > @ DQG
ZLWKLQ WKH f:2%$6=g SURMHFW 3ROLVK 0XOWLFHQWHU 6WXG\ RQ +HDOWK
3RSXODWLRQ > @ ZKHUH SUHYDOHQFH RI RYHUZHLJKW DQG REHVLW\ LQ WKH
JURXS RI DJH ZDV LQ PHQ DQG LQ ZRPHQ > @ DQG
SUHYDOHQFH RI WKH PHWDEROLF V\QGURPH LQ SHRSOH RYHU \HDUV ZDV
DQG UHVSHFWLYHO\ [illegible] LQ DFFRUGDQFH ZLWK
UHVXOWV RQ ORZ SK\VLFDO DFWLYLW\ RI WKH DGXOW SRSXODWLRQ > @
6LPLODU DODUPLQJ GDWD KDYH EHHQ VXSSOLHG RQ RYHUZHLJKW DQG REHVLW\
SUHYDOHQFH LQ FKLOGUHQ DQG DGROHVFHQWV IURP
DQG LQ HSLGHPLRORJLF VXUYH\ LQ .UDNRZ UHJLRQ LQ ER\V DQG
LQ JLUOV ZLWKLQ WKH JURXS RI DJH \HDUV > @ DQG LQ WKH JURXS
RI DJH \HDUV > @

HVHGDWHG DQG HDFWHQGHPLF VLWXDWLRQ RI W\SH GLDEHWHV PHOOLWXV
DQG OHDGLQJ ULVN IDFWRUV RYHUZHLJKW DQG REHVLW\ LQ 3ROLVK SRSXODWLR
,Q FRPSDULVRQ WR GDWD REWDLQHG LQ GHFDGHV HDUOLHU \HDUV EHIRUH
LQFUHDVH LV REVHUYHG

6LPLODU GDWD DUH [illegible] LQ WKH 86$ DQG JORERDO HSLGHPLRORJLF VLWXDWLRQ
LQ WKH 86$ DQG JORERDO HSLGHPLRORJLF VLWXDWLRQ RI WKH W\SH GLDEHWHV

	7\SH GLDEHWHV PHOOLWXV JOXFRVH LQWROHUDQFH
	0LFURDOEXPLQXULD ! —J O
	2EHVLW\ %0, ! :+5 ZRPHQ ! PHQ !
	+\SHUXULFHPLD
	,QFUHDVH FRQFHQWUDWLRQ RI WKH IDFWRUV 9,, ,; ;
	'\VOLSLGHPLD 7* ! PPRO O

7DEOH FRPSRQHQWV RI WKH LQVXOLQH UHVLVWDQFH V\QGURPH

,QVXOLQ 5HVLVWDQFH 6\QGURPH

,Q WKH PHWDEROLF SDWKZD\ RI W\SH GLDEHWHV PHOOLWXV IDWW\ WLVVXH HVSHFLDOO\ YLVFHUDO IDWW\ WLVVXH SOD\V YHU\ LPSRUWDQW UROH

H '(3/$1 SURMHFW SURYLGHG YDOXDEOH WRRO WR HYDOXDWH WKH ULVN RI WKH W\SH GLDEHWHV PHOOLWXV 7 ' LQ (XURSH f)LQQLVK 'LDEHWHV 5LVN 6FRUH),1'5,6& g DQG DOORZHG WR IRUPXODWH HYLGHQFH EDVHG JXLGHOLQH IRU WKH SUHYHQWLRQ RH W\SH GLDEHWHV PHOOLWXV LQ (XURSH SURMHFW JURXS REWDLQHG FRQVLGHUDEOH H[SHULHQFH LQ GHYHORSLQJ OLIHVW LQWHUYHQWLRQV DLPLQJ DW SUHYHQWLQJ 7 ' LQ KLJK ULVN LQGLYLGXDOV > @ H '(3/$1 SURMHFW KDV DOVR IRUPHG D EDVLV IRU WKH ,0$*(SURMHFW WKDW LV FXUUHQWO\ GHYHORSLQJ WKH (XURSHDQ JXLGHOLQH IRU WKH SUHYHQW RI 7 ' > @

H SUHYHQWLYH SURJUDP ,0$*(LV GHYHORSHG LQ OLQH ZLWK WKH :+2 *OREDO $FWLRQ 3ODQ IRU WKH 3UHYHQWLRQ DQG &RQWURO RI 1RQ FRPPXQLFDEOH 'LVHDVHV :KLOH GHYHORSHG E\ WKH $VVHPEO\ IRFXVHG RQ ULVN IDFWRUV XQKHDOWK\ GLHW DQG SK\VLFDO LQDFWLYLW\ DV WKH SHDQ JOREDO }HUDWHV RI ZHLJKW RYHUZHLJKW DQG REHVLW\ KDYH LQFUHDVHG E\ :+2 0LQLVWHULDO &RQIHUHQFH RQ 1XWULWLRQ DQG 1RQ FRPPXQLFDEOH 'LVHDVHV LQ WKH &RQWH[W RI +HDOWK LQ 9LHQQD -XO\ > @

&RQFOXVLRQ

(SLGHPLRORJLF LQYHVWLJDWLRQ XQGHUWDNHQ ZLWKLQ WKH ODVW \HDUV LQ WKH SUHYDOHQFH RI W\SH GLDEHWHV OHDGV WR WKH IROORZLQJ FRQFOXVLRQV H SUHYDOHQFH RI W\SH GLDEHWHV LQ 3RODQG KDV UHDFKHG DQ HQGHPLF OHYHO PLOOLRQV RI SHRSOH $URXQG RI SDWLHQWV UHSUHVHQW WKH VR FDOOHG XQNQRZQ GLDE}HUWWLPGLDQWRKHFRXWKRI LQYHVWLJDWLRQDO ULVN IDFWRUV RI W\SH GLDEHWHV DUH RYHUZHLJKW DQG REHVLW\

H SUHYLRXV H[SHULHQFH LQ FRQGXFWLQJ WKH